

September 22, 2020

Tyler Pederson
Minneapolis Park and Recreation Board
2117 West River Road
Minneapolis, Minnesota, 55411-2227

Mr. Lance Robinette
Hennepin County Environment and Energy Department
701 Fourth Avenue South, Suite 700
Minneapolis, MN 55415-1842

Re: Bryn Mawr Park Environmental Investigation Results

Dear Mr. Pederson and Mr. Robinette:

This letter presents the results of the environmental investigation completed in June and July 2020 at the Minneapolis Park and Recreation Board's (MPRB) Bryn Mawr Park in Minneapolis, Minnesota. The project location is shown on Figure 1.

Objectives

The investigation was funded by a Hennepin County Memorandum of Agreement Brownfields Gap Financing grant to MPRB. Information obtained during the investigation will be used by multiple organizations for forthcoming projects in the park, including redesign of the park by MPRB, replacing a City of Minneapolis sanitary sewer, and planning new stormwater management features by the Bassett Creek Watershed Management Organization which will be incorporated into the park redevelopment.

The Phase II investigation assessed the following soil, groundwater, and soil gas conditions at locations throughout the park (as shown on Figure 2) to evaluate the need to manage or mitigate contamination during forthcoming projects:

- Extent and magnitude of petroleum-related soil and groundwater contamination observed during a previous investigation near the proposed sanitary sewer alignment.
- Potential debris or chemical impacts in fill soil in areas with evidence of historical disturbance, including a former roadway corridor, a possible former dumping area in the northeast area of the site, and a former residential area.
- Potential impacts in soil in proposed stormwater management features (ponds).
- Soil gas concentrations within the footprint of the proposed building included in the MPRB's preliminary park plan.
- Potential impacts in shallow soils (0 to 2 feet below ground surface; bgs) in areas with anticipated grading for park redevelopment. These areas have historically been used for park fields, but fill

from unknown sources has been placed over the years in these areas. Soil sampling was completed using incremental sampling methodology (ISM) to obtain a representative unbiased estimate of mean contaminant concentrations.

The sample locations were selected based on review of historical information from aerial photos and the MPRB North Service Area Master Plan, dated February 6, 2019. Data and information from previous investigations at the site is included in Attachment A.

Investigation Scope and Methods

Field work included completion of soil borings, soil gas sample collection, installation of temporary wells, excavation of test excavations and shallow soil sampling using ISM at the sample locations are shown on Figures 2 and 3.

Eight borings (GP-01-20 through GP-08-20) were advanced by a licensed driller with a direct-push, tracked drill rig for the collection of soil and groundwater samples, and five additional borings were completed at locations a few feet from the original borings to further delineate identified petroleum impacts. Groundwater samples were collected at 3 boring locations where temporary wells were installed using new 1" PVC screen and riser. Soil gas sample points were advanced at two locations and the sample tubing was fitted to the sample point using post-run tubing methods. Soil gas samples were collected with a 1.4-L vacuum canister using a 200 ml/min flow controller supplied by the laboratory. Borings were sealed in accordance with state and local codes.

Fifteen test excavations were conducted using a small backhoe to assess the condition of fill soil in a former residential area on the west side of the site, and in the northeast corner of the site, where there are soil and debris stockpiles and evidence of historical ground disturbance possibly associated with dumping. Material removed from the test excavation was replaced in the order it was removed in approximately two foot lifts and re-compacted with the excavator bucket.

Soil throughout the depth of soil borings and test excavations was continuously logged and inspected for visual evidence of debris and other evidence of contamination such as staining, odors, discoloration, and/or sheen. Headspace readings will be collected with a photoionization detector equipped with a 10.6 eV lamp in accordance with Barr Engineering Co. standard operating procedures (SOPs). Soils were classified in general accordance with American Standard Testing Methods (ASTM) D2488.

ISM soil samples were collected with hand coring devices at 30 locations in two Decision Units (DU), covering the southwest fields and ice rinks (DU1), and northern ball fields (DU2). ISM aliquots were collected from the near-surface soil interval (0.5 to 1.5 feet bgs), below the topsoil and composited in the field and again in the laboratory based on methods outlined in the Interstate Technology and Regulatory Council guidance (ITRC, 2012), resulting in one analytical result representing a mean concentration for each DU. One aliquot that exhibited impacts was field screened and placed in separate container for separate laboratory analysis.

Horizontal coordinates of investigation locations were surveyed using a hand-held global positioning system (GPS) device to the nearest 1 foot, referenced to the Universal Transverse Mercator (UTM) coordinate grid system North American Datum [NAD]-83.

Soil, groundwater, and soil gas samples collected using direct push probe and excavation equipment were submitted to Legend Technical Services, Inc. in St. Paul, Minnesota for analysis. Soil samples collected using ISM were submitted to ALS in Kelso, Washington.

Investigation Results

Field Observations

The investigation identified fill soils across the site. Boring and test excavation logs are included in Attachment B. Test excavation photos are included in Attachment C. A summary of observed impacts and debris is shown on Figure 4 and summarized below:

- Apparent petroleum impacts were identified in borings GP-05-20 and GP-07-20 and adjacent delineation borings, at similar depths intervals to the impacts identified at GP-19-10 during a previous investigation. These borings were completed along a former roadway that was historically present in an east-west alignment across the site. The observations generally included black discolored soils, light to strong odors and a light to heavy sheen, typically at depths of about 3 to 8 feet bgs and up to 13 feet bgs at GP-07-20. Most PID readings were less than 10 ppm; the maximum reading was 21 ppm at GP-07E-20 at 6 feet bgs.
- Fill with trace to moderate debris, and evidence of former foundations or concrete slabs was identified in some test excavations completed in the former residential area (TE-01-20 through TE-05-20) on the west side of the site.
- Test Excavations completed on the east side of the site identified varying levels of debris in the fill at nearly all locations, ranging from piles of concrete visible at the ground surface to municipal type waste, glass, metal pipes and rails, demolition debris and an asphalt slab. This area includes visible soil stockpiles that have become vegetated over time, stockpiles of debris and waste in the wooded area, piles of concrete, as well as debris in the fill soils outside the mounded and vegetated area.

Soil Analytical Results

Soil analytical data is compared to MPCA Recreational and Residential Soil Reference Values (SRVs) and Soil Leaching Values (SLVs) in Table 1. MPCA Recreational SRVs are applicable for the current and future use of the site as a park. Residential SRVs and SLV are used to evaluate whether soil meets MPCA Best Management Practices (BMPs) for Offsite Reuse of Unregulated Fill (MPCA, 2012), listed below:

- free from solid waste, debris, ACM, visual staining, and chemical odor;
- organic vapors less than 10 parts per million, as measured by a photoionization detector (PID);
- less than 100 mg/kg DRO/ GRO; and
- for contaminants detected in soil, less than the MPCA's Residential Soil Reference Values (SRVs) and Tier 1 Soil Leaching Values (SLVs)*.

*Naturally-occurring concentrations of some metals, such as arsenic, selenium, or copper, sometimes exceed the SRV or SLV. Such soils are not considered impacted in the absence of a contaminant source or other field or laboratory indications of contamination.

The following results exceed those MPCA Recreational SRVs and/or BMPs for Unregulated Fill:

- Lead concentrations are above the MPCA Recreational/Residential SRV of 300 mg/kg at TE-06-20 and TE-13-20, both located in the area of historical dumping and filling in the northeast corner of

the site. If these soils are excavated and removed from the site and disposed of at a landfill, they may also require additional Toxicity Characteristic Leaching Tests to demonstrate they are not characteristically hazardous, or may require stabilization.

- Some soil samples have concentrations of benzo(a)pyrene equivalents above SLVs, but all were below MPCA background threshold value of 2 mg/kg.
- DRO results are above 100 mg/kg two borings and multiple test excavation locations, indicating the fill does not meet MPCA unregulated fill guidance for reuse at other sites (MPCA, 2012). The highest DRO concentration at the site was 3300, identified in 2019 at GP-19-10, in the layer of petroleum impacted soil (See Attachment A).
- Incremental soil sampling results indicate the fill soils in both decision units meet Recreational and soil reuse guidelines, except for one DRO result of 140 mg/kg at an aliquot from DU-1, L1.

Groundwater Analytical Results

Groundwater data is compared to MN Class 2B Surface Water Quality Criteria in Table 1. Barium was the only parameter detected; concentrations are below criteria. Groundwater results from one sample location in 2019 (GP-19-08) indicated DRO at a concentration of 370 mg/L and total metals concentrations of arsenic, cadmium, chromium and lead above Surface Water Quality Standards, but dissolved concentrations are below criteria (See Attachment A).

Soil Gas Analytical Results

Soil gas analytical results are compared to 33X MPCA Commercial/Industrial Intrusion Screening Values in Table 3. Some VOCs, primarily petroleum-related compounds, were detected, but all results are below the screening values.

Conclusions and Recommendations

The investigations completed at the site provide useful data for developing or refining response action plans for multiple municipal and park projects planned for the site.

Soil samples from most areas of the site meet MPCA Recreational SRVs and BMPs for Offsite Reuse of Unregulated Fill, indicating those soils meet the MPCA guidance for the current land use and are acceptable for reuse offsite, if removed. Isolated areas of petroleum-related impacts were observed in some soils along a historical roadway, and lead, DRO impacts and significant debris are present in and near the wooded area in the northeast area of the site. Concrete foundations and minor amounts of debris were also identified in test trenches in the former residential area of the site, but no chemical impacts were identified. The identified impacts in soil are located beneath clean cover soil and therefore do not present a risk to current park users and staff if left undisturbed.

Environmental field screening during installation of utilities or other excavation would be useful in further delineating the extent of the petroleum-related impacts and debris to direct the management of these materials. Management options could include on-site reuse, off-site export in accordance with MPCA's BMPs for Unregulated Fill, or landfill disposal. This investigation data may also be used to assess the soil management approach and appropriateness of stormwater infiltration during design of stormwater management features. The significant debris and historical dump materials in the northeast corner of the site may present physical and geotechnical challenges for features constructed in this area as well. Soil vapor concerns were not identified at the site and vapor mitigation in current or future buildings does not appear warranted. Groundwater data indicates that some metals associated with particulates and DRO are

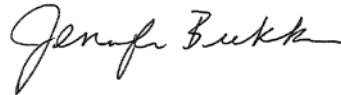
present in the water, which may prohibit discharge of dewatering water to the storm sewers/surface waters during utility construction.

We look forward to the MPRB, MWMO and the City's use of this information in future plans for the park and infrastructure. Please contact Dan Fetter (dfetter@barr.com) or Jenni Brekken (jbrekken@barr.com) if you have questions.

Regards,



Dan Fetter, P.E
Vice-President



Jenni Brekken
Project Manager

Cc:

Kelly McIntyre, City of Minneapolis
Chris DeDene, City of Minneapolis
Laura Jester, Bassett Creek Watershed Management Commission
Michelle Kimble, Barr Engineering Co.
Karen Chandler, Barr Engineering Co.
Kurt Leuthold, Barr Engineering Co.

Attachments:

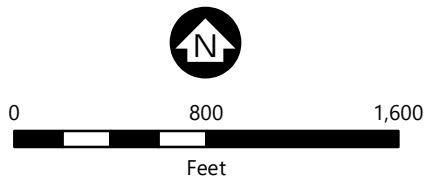
Figure 1 – Site Location
Figure 2 – Investigation Locations
Figure 3 – ISM Sample Aliquot Locations
Figure 4 – Summary of Identified Impacts

Table 1 – Soil Analytical Results Summary
Table 2 – Groundwater Analytical Results Summary
Table 3 – Soil Gas Analytical Results Summary

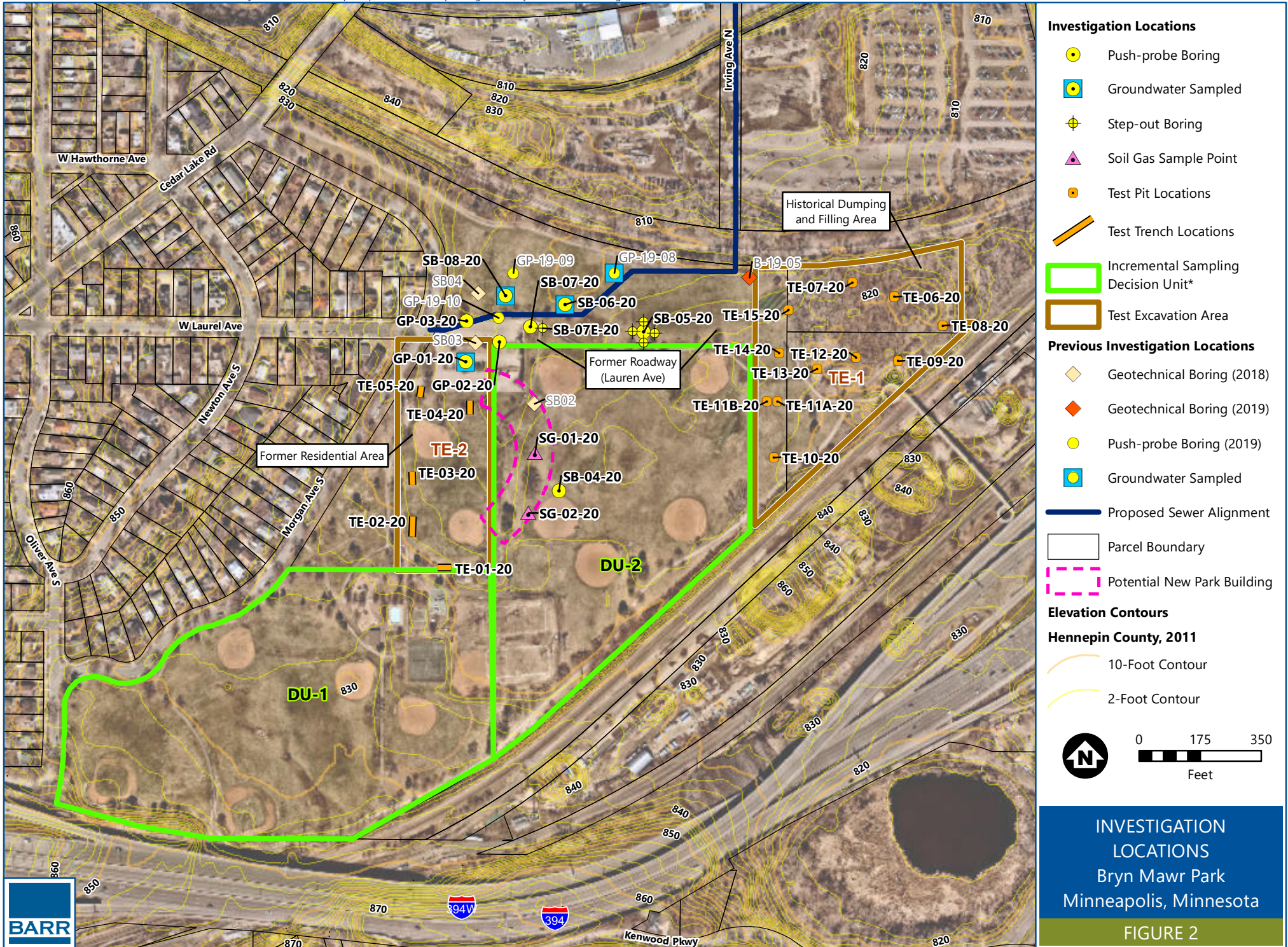
Attachment A – Previous Investigation Information
Attachment B – Boring and Test Excavation Logs
Attachment C – Photographic Log
Attachment D – Laboratory Analytical Data

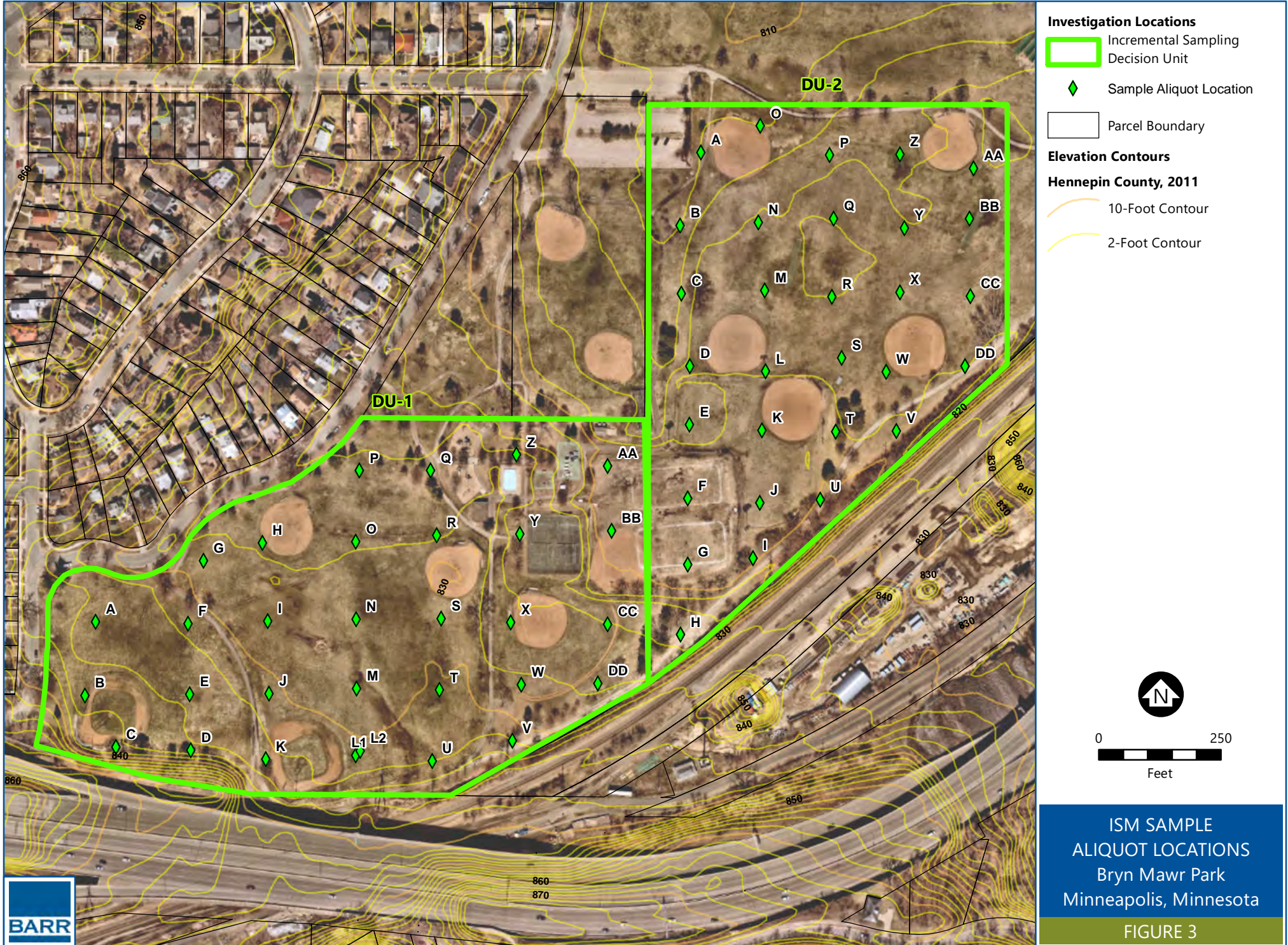
References:

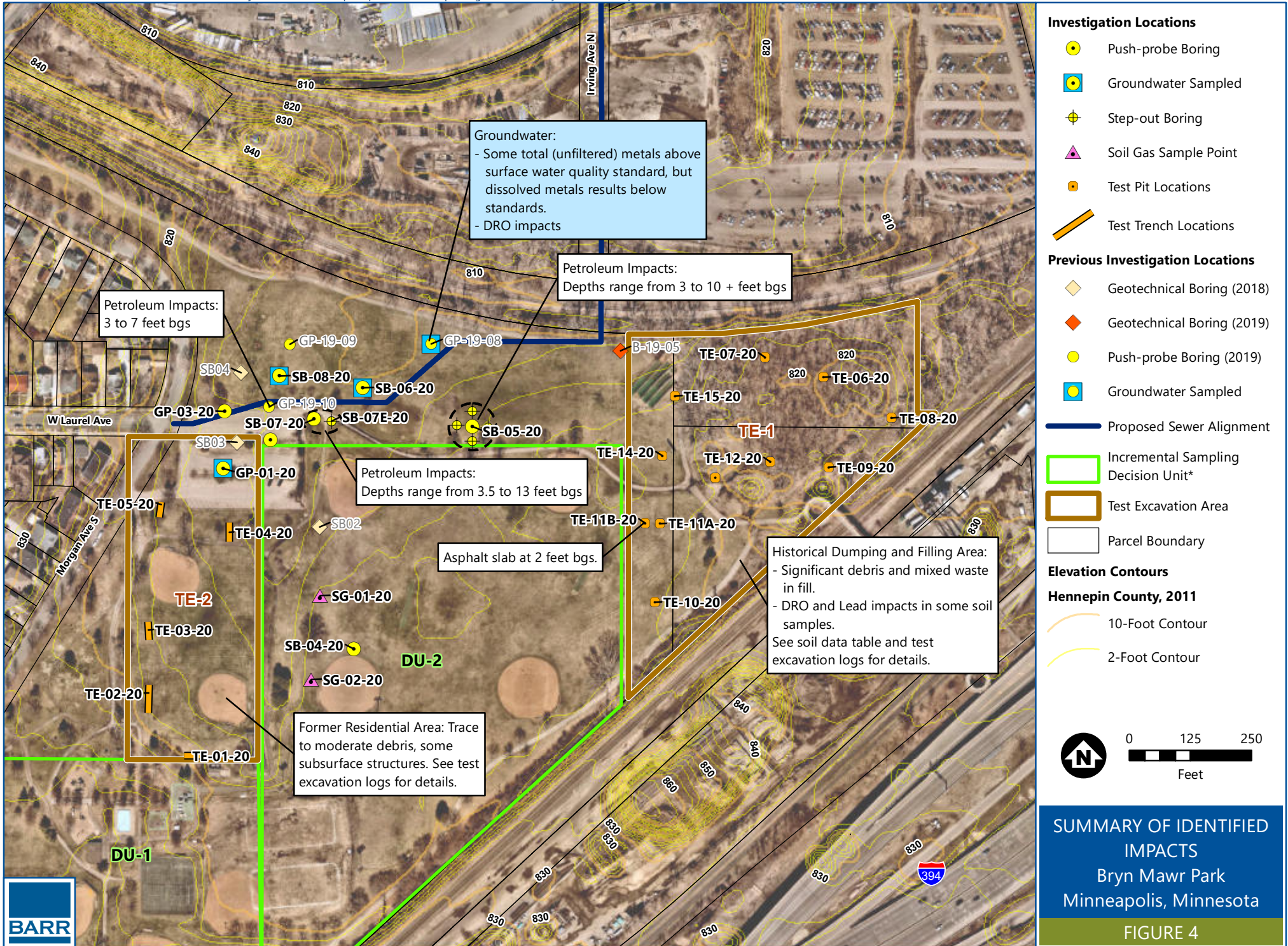
MPCA, 2012. Best Management Practices for the Off-Site Reuse of Unregulated Fill. c-rem1-01. February 2012.



SITE LOCATION
Bryn Mawr Park
Minneapolis, Minnesota
FIGURE 1







SUMMARY OF IDENTIFIED IMPACTS
Bryn Mawr Park
Minneapolis, Minnesota
FIGURE 4

Table 1
Soil Analytical Data Summary
Bryn Mawr Park
Minneapolis, Minnesota

Parameter	Analysis Location	MPCA Screening Soil Leaching Values	MPCA Tier 1 Residential Soil Reference Values	MPCA Tier 2 Recreational Soil Reference Values	Location	DU-1	DU1-L1	DU-2	GP-01-20	GP-02-20	GP-02-20	GP-03-20	GP-03-20	GP-04-20	GP-05-20	GP-05-20	GP-05-20	GP-06-20	GP-07-20	
					Date	6/24/2020	6/24/2020	6/24/2020	6/29/2020	6/29/2020	6/29/2020	6/29/2020	6/29/2020	7/15/2020	7/15/2020	7/15/2020	7/15/2020	7/15/2020	7/15/2020	7/15/2020
					Depth		0.5 - 1.5 ft		0 - 4 ft	2 - 6 ft	3 ft	0 - 4 ft	3 ft	0 - 3 ft	0 - 3 ft	5 - 7 ft	6 ft	0 - 3.5 ft	5 - 7 ft	
Effective Date		06/01/2013	12/30/2019	12/30/2019																
Exceedance Key		Bold	<i>Italic</i>	<u>Underline</u>																
General Parameters [%]																				
Solids, percent	Lab					--	--	--	89	89	89	90	90	91	85	89	89	91	88	
Solids, total	Lab					88.8 98.0	77.5	92.0 98.8	--	--	--	--	--	--	--	--	--	--	--	
Metals [mg/kg]																				
Arsenic	Lab	5.8	9	11	5.4 J	8.3	5.1 J	3.5	5.2	--	4.7	--	5.7	3.0	2.3	--	3.5	3.1		
Barium	Lab	1700	1100	1100	114 J	142	90.2	81	53	--	42	--	96	65	46	--	78	84		
Cadmium	Lab	8.8	25	35	0.24	0.66	0.29	0.24	0.14	--	0.14	--	0.41	0.12	0.073	--	0.23	0.12		
Chromium	Lab	36 CR6	87 CR6	120 CR6	14.2	13.7	11.5	10	15	--	12	--	14	9.7	8.8	--	13	11		
Lead	Lab	2700	300	300	24.6 J	171 J-	27.0	110	24	--	16	--	90 J	49	8.7	--	130	56		
Mercury	Lab	3.3 MC	0.5	1.2 MC	0.048	0.176	0.044	< 0.56 U	< 0.56 U	--	< 0.56 U	--	0.74	< 0.59 U	< 0.56 U	--	< 0.55 U	< 0.57 U		
Selenium	Lab	2.6	160	200	< 1.7 U	< 1.3 U	< 1.5 U	< 2.8 U	< 2.8 U	--	< 2.8 U	--	< 2.7 U	< 2.9 U	< 2.8 U	--	< 2.7 U	< 2.8 U		
Silver	Lab	7.9	160	200	< 0.25 U	< 0.19 U	< 0.23 U	< 0.56 U	< 0.56 U	--	< 0.56 U	--	< 0.55 U	< 0.59 U	< 0.56 U	--	< 0.55 U	< 0.57 U		
Semivolatile Organic Compounds [mg/kg]																				
Benz(a)anthracene	Lab	T	T	T	0.11	0.5 J+	0.12	1.5	< 0.93 U	--	< 0.37 U	--	1.7	< 0.39 U	< 0.37 U	--	1.2	0.81		
Benzo(a)pyrene	Lab	T	2 T(BTV)	2 T(BTV)	0.13	0.53 J+	0.15	1.2	< 0.93 U	--	< 0.37 U	--	1.3	< 0.39 U	< 0.37 U	--	1.1	0.57		
Benzo(b)fluoranthene	Lab	T	T	T	0.16	0.64 J+	0.15	1.5	< 0.93 U	--	< 0.37 U	--	1.6	< 0.39 U	< 0.37 U	--	1.3	0.66		
Benzo(k)fluoranthene	Lab	T	T	T	0.06	0.25 J+	0.064	< 0.93 U	< 0.93 U	--	< 0.37 U	--	0.66	< 0.39 U	< 0.37 U	--	0.58	< 0.38 U		
Chrysene	Lab	T	T	T	0.11	0.52 J+	0.13	1.4	< 0.93 U	--	< 0.37 U	--	1.8	< 0.39 U	< 0.37 U	--	1.3	0.86		
Dibenz(a,h)anthracene	Lab	T	T	T	0.016	0.086	0.019	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Indeno(1,2,3-cd)pyrene	Lab	T	T	T	0.084	0.37 J+	0.088	< 0.93 U	< 0.93 U	--	< 0.37 U	--	0.78	< 0.39 U	< 0.37 U	--	0.62	< 0.38 U		
B(a)P Equivalent, non-detects at 1/2, 2002 PEFs	Barr Calculation	1.4 T	2 T(BTV)	2 T(BTV)	0.18	0.76 a	0.2	1.9	0.92	--	0.36	--	1.9	0.38	0.36	--	1.6	0.87		
2-Chloronaphthalene	Lab				--	--	--	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
2-Methylnaphthalene	Lab		100	120	0.0029 J	0.051	0.0029 J	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Acenaphthene	Lab	81	1200	1860	0.0047 J	0.026	0.0039 J	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Acenaphthylene	Lab	NA			0.0073	0.041	0.0082	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Anthracene	Lab	1300	7880	10000	0.019	0.11 J+	0.015	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Dibenzofuran	Lab	NA	104	130	0.0033 J	0.024	0.0033 J	--	--	--	--	--	--	--	--	--	--	--		
Fluoranthene	Lab	670	1080	1290	0.21	0.84 J+	0.18	2.5	< 0.93 U	--	< 0.37 U	--	2.7	< 0.39 U	0.39	--	1.8	1.4		
Fluorene	Lab	110	850	1200	0.0057	0.028	0.0047 J	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Naphthalene	Lab	4.5	10	24	< 0.0030 UB	0.044	< 0.0026 UB	< 0.93 U	< 0.93 U	--	< 0.37 U	--	< 0.36 U	< 0.39 U	< 0.37 U	--	< 0.36 U	< 0.38 U		
Phenanthrene	Lab	NA			0.08	0.47 J+	0.061	< 0.93 U	< 0.93 U	--	< 0.37 U	--	0.66	< 0.39 U	< 0.37 U	--	0.72	0.41		
Pyrene	Lab	440	890	1060	0.24	1 J+	0.21	2.1	< 0.93 U	--	< 0.37 U	--	2.4	< 0.39 U	< 0.37 U	--	1.7	1.4		
Benzo(g,h,i)perylene	Lab	NA			0.075	0.36 J+	0.075	< 0.93 U	< 0.93 U	--	< 0.37 U	--	0.69	< 0.39 U	< 0.37 U	--	0.57	< 0.38 U		
Volatile Organic Compounds [mg/kg]																				
1,2,4-Trimethylbenzene	Lab	2.7	8	20	--	--	--	--	--	< 0.22 U	--	< 0.22 U	--	--	--	--	< 0.22 U	--	< 0.23 U	
Cymene p- (toluene isopropyl p-)	Lab				--	--	--	--	--	< 0.22 U	--	< 0.22 U	--	--	--	--	< 0.22 U	--	< 0.23 U	
Total Petroleum Hydrocarbons [mg/kg]																				
Diesel Range Organics, silica gel cleanup	Lab				< 12 UB	150	18	33	140	--	14	--	31	< 7.1 U	77	--	68	34		
Gasoline Range Organics, C6-C10	Lab				--	--	--	--	--	< 5.6 U	--	< 5.6 U	--	--	--	--	< 5.6 U	--	< 5.7 U	

* VOCs that were not detected above the laboratory reporting limit are not shown. See the lab report.

**Table 1
Soil Analytical Data Summary
Bryn Mawr Park
Minneapolis, Minnesota**

Parameter	Analysis Location	MPCA Screening Soil Leaching Values	MPCA Tier 1 Residential Soil Reference Values	MPCA Tier 2 Recreational Soil Reference Values	Location	GP-07-20	GP-08-20	GP-08-20	TE-01-20	TE-03-20	TE-04-20	TE-06-20	TE-06-20	TE-07-20	TE-07-20	TE-10-20	TE-13-20	TE-13-20	TE-15-20			
					Date	7/15/2020	7/15/2020	7/15/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/17/2020	7/17/2020	7/17/2020	7/17/2020	7/17/2020
					Depth	14 - 15 ft	2 - 6 ft	5 - 6 ft	0 - 3.5 ft	0 - 1.5 ft	0 - 4 ft	4 - 9 ft	6 ft	4 - 9 ft	8 ft	0 - 3 ft	3 - 7 ft	3.5 ft	0 - 5 ft			
Effective Date		06/01/2013	12/30/2019	12/30/2019																		
Exceedance Key		Bold	<i>Italic</i>	<u>Underline</u>																		
General Parameters [%]																						
Solids, percent	Lab				90	90	90	91	94	92	93	93	88	88	89	89	89	91				
Solids, total	Lab				--	--	--	--	--	--	--	--	--	--	--	--	--	--				
Metals [mg/kg]																						
Arsenic	Lab	5.8	9	11	1.5	3.4	--	5.0	5.5	2.2	1.7	--	2.3	--	4.3	4.6	--	2.6				
Barium	Lab	1700	1100	1100	18	51	--	70	110	21	31	--	44	--	50	64	--	37				
Cadmium	Lab	8.8	25	35	< 0.056 U	0.18	--	0.23	0.23	< 0.054 U	0.51	--	0.43	--	0.37	0.96	--	0.34				
Chromium	Lab	36 CR6	87 CR6	120 CR6	8.3	11	--	10	11	8.0	6.0	--	8.5	--	9.3	15	--	11				
Lead	Lab	2700	300	<u>300</u>	2.0	29	--	39	50	8.8	<u>560</u>	--	210	--	160	<u>510</u>	--	190				
Mercury	Lab	3.3 MC	0.5	1.2 MC	< 0.56 U	< 0.56 U	--	< 0.55 U	< 0.53 U	< 0.54 U	< 0.54 U	--	< 0.57 U	--	< 0.56 U	< 0.56 U	--	< 0.55 U				
Selenium	Lab	2.6	160	200	< 2.8 U	< 2.8 U	--	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	--	< 2.8 U	--	< 2.8 U	< 2.8 U	--	< 2.7 U				
Silver	Lab	7.9	160	200	< 0.56 U	< 0.56 U	--	< 0.55 U	< 0.53 U	< 0.54 U	< 0.54 U	--	< 0.57 U	--	< 0.56 U	< 0.56 U	--	< 0.55 U				
Semivolatile Organic Compounds [mg/kg]																						
Benz(a)anthracene	Lab	T	T	T	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	1.5	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Benzo(a)pyrene	Lab	T	2 T(BTV)	2 T(BTV)	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Benzo(b)fluoranthene	Lab	T	T	T	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	1.9	--	< 1.9 U	--	< 1.5 U	1.6	--	< 1.5 U				
Benzo(k)fluoranthene	Lab	T	T	T	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Chrysene	Lab	T	T	T	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	1.9	--	< 1.9 U	--	< 1.5 U	1.5	--	< 1.5 U				
Dibenz(a,h)anthracene	Lab	T	T	T	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Indeno(1,2,3-cd)pyrene	Lab	T	T	T	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
B(a)P Equivalent, non-detects at 1/2, 2002 PEFs	Barr Calculation	1.4 T	2 T(BTV)	2 T(BTV)	0.36	0.36	--	0.35	0.35	0.35	1.6	--	1.9	--	1.5	1.6	--	1.5				
2-Chloronaphthalene	Lab				< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
2-Methylnaphthalene	Lab		100	120	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Acenaphthene	Lab	81	1200	1860	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Acenaphthylene	Lab	NA			< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Anthracene	Lab	1300	7880	10000	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Dibenzofuran	Lab	NA	104	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Fluoranthene	Lab	670	1080	1290	< 0.37 U	< 0.37 U	--	0.48	< 0.35 U	< 0.36 U	3.5	--	2.4	--	< 1.5 U	2.8	--	< 1.5 U				
Fluorene	Lab	110	850	1200	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Naphthalene	Lab	4.5	10	24	< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Phenanthrene	Lab	NA			< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	2.7	--	1.9	--	< 1.5 U	2.1	--	< 1.5 U				
Pyrene	Lab	440	890	1060	< 0.37 U	< 0.37 U	--	0.59	< 0.35 U	< 0.36 U	3.0	--	2.0	--	< 1.5 U	2.5	--	< 1.5 U				
Benzo(g,h,i)perylene	Lab	NA			< 0.37 U	< 0.37 U	--	< 0.36 U	< 0.35 U	< 0.36 U	< 1.4 U	--	< 1.9 U	--	< 1.5 U	< 1.5 U	--	< 1.5 U				
Volatile Organic Compounds [mg/kg]																						
1,2,4-Trimethylbenzene	Lab	2.7	8	20	--	--	< 0.22 U	--	--	--	--	0.31	--	< 0.23 U	--	--	< 0.22 U	--				
Cymene p- (toluene isopropyl p-)	Lab				--	--	< 0.22 U	--	--	--	--	1.1	--	< 0.23 U	--	--	< 0.22 U	--				
Total Petroleum Hydrocarbons [mg/kg]																						
Diesel Range Organics, silica gel cleanup	Lab				< 5.8 U	< 6.6 U	--	7.6	8.5	< 7.3 U	1400	--	630	--	120	760	--	48				
Gasoline Range Organics, C6-C10	Lab				--	--	< 5.6 U	--	--	--	--	34	--	< 5.7 U	--	--	6.4	--				

* VOCs that were not detected above the laboratory reporting limit are not shown. See the lab report.

Table 2
Groundwater Analytical Data Summary
Bryn Mawr Park
Minneapolis, Minnesota

					Location	GP-01-20
					Date	6/29/2020
Parameter	Minnesota Surface Water 2B Chronic Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Maximum Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Final Acute Value 7050 *Hardness=200 mg/L	MCES Pre-Treatment Standards		
Effective Date	01/24/2012	01/24/2012	01/24/2012	02/01/2013		
Exceedance Key	No Exceed	No Exceed	No Exceed	No Exceed		
Dissolved Metals [mg/l]						
Arsenic	0.053	0.36	0.72		< 0.020 U	
Barium					0.30	
Cadmium	0.002 HD	0.073 HD	0.146 HD	1.0	< 0.0010 U	
Chromium	0.011 CR6	0.016 CR6	0.032 CR6	6.0	< 0.010 U	
Lead	0.0077 HD	0.197 HD	0.396 HD	1.0	< 0.015 U	
Mercury	0.000069	0.0024 (1)	0.0049 (1)	0.002	< 0.010 U	
Selenium	0.0050	0.02	0.04		< 0.050 U	
Silver	0.001	0.0067 HD	0.013 HD		< 0.010 U	
Semivolatile Organic Compounds [ug/l]						
2-Chloronaphthalene					< 10 UH	
2-Methylnaphthalene					< 10 UH	
Acenaphthene	20	56	112		< 10 UH	
Acenaphthylene					< 10 UH	
Anthracene	0.035	0.32	0.63		< 10 UH	
Benz(a)anthracene					< 10 UH	
Benzo(a)pyrene					< 10 UH	
Benzo(b)fluoranthene					< 10 UH	
Benzo(g,h,i)perylene					< 10 UH	
Benzo(k)fluoranthene					< 10 UH	
Chrysene					< 10 UH	
Dibenz(a,h)anthracene					< 10 UH	
Fluoranthene	1.9	3.5	6.9		< 10 UH	
Fluorene					< 10 UH	
Indeno(1,2,3-cd)pyrene					< 10 UH	
Naphthalene	81	409	818		< 10 UH	
Phenanthrene	3.6	32	64		< 10 UH	
Pyrene					< 10 UH	
Total Petroleum Hydrocarbons [ug/l]						
Diesel Range Organics, silica gel cleanup					< 110 UH	
Gasoline Range Organics, C6-C10					< 100 U	

VOCs that were not detected above the laboratory reporting limit are not shown. See the lab report.

* Reference:

Average hardness value from 2016-2017 MCES Watershed Outlet Monitoring Program

Table 2
Groundwater Analytical Data Summary
Bryn Mawr Park
Minneapolis, Minnesota

	GP-06-20 7/15/2020	GP-08-20 7/15/2020
Parameter		
Effective Date		
Exceedance Key		
Dissolved Metals [mg/l]		
Arsenic	< 0.020 U	< 0.020 U
Barium	0.23	0.15
Cadmium	< 0.0010 U	< 0.0010 U
Chromium	< 0.010 U	< 0.010 U
Lead	< 0.015 U	< 0.015 U
Mercury	< 0.010 U	< 0.010 U
Selenium	< 0.050 U	< 0.050 U
Silver	< 0.010 U	< 0.010 U
Semivolatile Organic Compounds [ug/l]		
2-Chloronaphthalene	< 11 U	--
2-Methylnaphthalene	< 11 U	--
Acenaphthene	< 11 U	--
Acenaphthylene	< 11 U	--
Anthracene	< 11 U	--
Benz(a)anthracene	< 11 UJ-	--
Benzo(a)pyrene	< 11 UJ-	--
Benzo(b)fluoranthene	< 11 UJ-	--
Benzo(g,h,i)perylene	< 11 UJ-	--
Benzo(k)fluoranthene	< 11 UJ-	--
Chrysene	< 11 UJ-	--
Dibenz(a,h)anthracene	< 11 UJ-	--
Fluoranthene	< 11 U	--
Fluorene	< 11 U	--
Indeno(1,2,3-cd)pyrene	< 11 UJ-	--
Naphthalene	< 11 U	--
Phenanthrene	< 11 U	--
Pyrene	< 11 U	--
Total Petroleum Hydrocarbons [ug/l]		
Diesel Range Organics, silica gel cleanup	< 110 U	< 110 U
Gasoline Range Organics, C6-C10	< 100 U	< 100 U

VOCs that were not detected above the labora

* Reference:

Average hardness value from 2016-2017 MC

Table 3
Soil Gas Analytical Data Summary
Bryn Mawr Park
Minneapolis, Minnesota

Parameter [ug/m3]	Location	SG-01-20	SG-02-20
	Date	7/15/2020	7/15/2020
	MPCA Commercial/Industrial 33X Intrusion Screening Values (ISVs) for Vapor Intrusion Risk Evaluation		
Effective Date	05/29/2019		
Exceedance Key	No Exceed		
Total Petroleum Hydrocarbons			
1,1,1-Trichloroethane	600000	< 2.7 U	< 2.7 U
1,1,2,2-Tetrachloroethane	NA	< 3.4 U	< 3.4 U
1,1,2-Trichloroethane	23	< 2.7 U	< 2.7 U
1,1-Dichloroethane	NA	< 2.0 U	< 2.0 U
1,1-Dichloroethylene	23000	< 2.0 U	< 2.0 U
1,2,4-Trichlorobenzene	230	< 3.7 U	< 3.7 U
1,2,4-Trimethylbenzene	7000	26	25
1,2-Dibromoethane (EDB)	5.3	< 3.8 U	< 3.8 U
1,2-Dichlorobenzene	NA	< 3.0 U	< 3.0 U
1,2-Dichloroethane	130	< 2.0 U	< 2.0 U
1,2-Dichloroethylene, cis	NA	< 2.0 U	< 2.0 U
1,2-Dichloroethylene, trans	NA	< 2.0 U	< 2.0 U
1,2-Dichloropropane	470	< 2.3 U	< 2.3 U
1,3,5-Trimethylbenzene	7000	7.2	6.9
1,3-Butadiene	90	18	4.1
1,3-Dichlorobenzene	NA	< 3.0 U	< 3.0 U
1,3-Dichloropropene, cis	830 (2)	< 2.3 U	< 2.3 U
1,3-Dichloropropene, trans	830 (2)	< 2.3 U	< 2.3 U
1,4-Dichlorobenzene	7000	< 3.0 U	< 3.0 U
1-Decene		--	69 N TIC
1-Propyne		25 N TIC	13 N TIC
2-Hexanone	3700	2.3	< 2.0 U
4-Ethyltoluene	NA	8.4	8.3
Acetaldehyde		26 N TIC	--
Acetone	3700000	130	38
Benzene	1500	27	11
Benzyl chloride	67	< 2.6 U	< 2.6 U
Bromodichloromethane	2300 (1)	< 3.4 U	< 3.4 U
Bromoform	NA	< 5.2 U	< 5.2 U
Bromomethane	600	< 1.9 U	< 1.9 U
Butane (C4)		46 N TIC	27 N TIC
Butane, 2-methyl-		47 N TIC	36 N TIC
Carbon disulfide	93000	8.7	6.9
Carbon tetrachloride	530	< 3.1 U	< 3.1 U
Chlorobenzene	6000	< 2.3 U	< 2.3 U
Chlorodibromomethane	NA	< 4.3 U	< 4.3 U
Chloroethane	470000 (1)	< 1.3 U	< 1.3 U
Chloroform	12000	< 2.4 U	< 2.4 U
Chloromethane	11000	< 1.0 U	< 1.0 U
Cyclohexane	700000	13	5.0
Cyclohexanone		110 N TIC	64 N TIC
Decane		210 N TIC	230 N TIC
Dichlorodifluoromethane (Freon-12)	NA	< 2.5 U	< 2.5 U
Dichlorotetrafluoroethane		< 3.5 U	< 3.5 U
Ethyl acetate	8300	< 1.8 U	< 1.8 U
Ethyl alcohol	NA	33	15
Ethyl benzene	1300	48	29
Heptane	47000	63	24
Hexachlorobutadiene	NA	< 5.3 U	< 5.3 U
Hexane (C6)	83000	33	12
Isobutene		73 N TIC	16 N TIC
Isopropyl alcohol	23000	13	5.0
Methyl ethyl ketone (2-butanone)	600000	30	9.2
Methyl isobutyl ketone (MIBK)	370000	5.0	9.8
Methyl tertiary butyl ether (MTBE)	13000	< 1.8 U	< 1.8 U
Methylene chloride	70000	< 1.7 U	< 1.7 U
Naphthalene	1100	< 2.6 U	< 2.6 U
Octane		--	31 N TIC
Pentane (C5)		38 N TIC	27 N TIC
Propylene	370000	240	27
Styrene	110000	< 2.1 U	< 2.1 U
Tetrachloroethylene	1100	< 3.4 U	< 3.4 U
Tetrahydrofuran	230000	5.7	1.9
Toluene	470000	240	100
Trichloroethylene (TCE)	230 (3)	< 1.1 U	< 1.1 U
Trichlorofluoromethane (Freon-11)	120000 (1)	< 2.8 U	< 2.8 U
Trichlorotrifluoroethane (Freon 113)	600000	< 3.8 U	< 3.8 U
Tridecane, 6-propyl-		120 N TIC	100 N TIC
Undecane, 4-methyl-		120 N TIC	100 N TIC
Vinyl acetate	23000	< 1.8 U	< 1.8 U
Vinyl chloride	730 (4)	< 0.51 U	< 0.51 U
Xylene, m & p	12000 (5)	220	120
Xylene, o	12000 (5)	47	30
Xylenes, total (Barr Calculation)	12000 (5)	267	150

Attachment A

Previous Investigation Information

Table 1a
Soil Analytical Data Summary
General Parameters, Metals, TCLP Metals, SVOCs and TPH
Irving Ave Sewer Replacement Project
Minneapolis, Minnesota

Parameter	Units	MPCA Tier 1 Residential Soil Reference Values	MPCA Unregulated Fill Guidelines	MPCA Screening Soil Leaching Values	Location Date	B-19-05	GP-19-08	GP-19-09	GP-19-10
					11/26/2019	11/26/2019	11/26/2019	11/26/2019	
					Depth	0 - 4 ft	1.5 - 10 ft	1 - 5.5 ft	5 - 6.5 ft
					Sample Type	N	N	N	N
Effective Date		06/22/2009	February 2012	06/01/2013					
Exceedance Key		Bold	Shade	<i>Italic</i>					
General Parameters									
Cyanide, reactive	mg/kg				--	--	--	--	--
Flash point	deg F				--	--	--	--	--
Solids, percent	%				89	84	84	86	86
Sulfide reactive	mg/kg				--	--	--	--	--
Metals									
Antimony	mg/kg	12		5.4	--	--	--	--	--
Arsenic	mg/kg	9		5.8	4.8	2.7	3.2	2.8	2.8
Barium	mg/kg	1100		1700	69	49	100	56	56
Beryllium	mg/kg	55		2.7	--	--	--	--	--
Cadmium	mg/kg	25		8.8	0.40	0.092	0.21	0.11	0.11
Chromium	mg/kg	87 CR6		36 CR6	14	6.8	9.0	13	13
Copper	mg/kg	100		700	--	--	--	--	--
Lead	mg/kg	300		2700	110	26	37	7.2	7.2
Mercury	mg/kg	0.5		3.3 MC	< 0.56	< 0.60	< 0.55	< 0.58	< 0.58
Nickel	mg/kg	560		180	--	--	--	--	--
Selenium	mg/kg	160		2.6	< 2.8	< 3.0	< 2.7	< 2.9	< 2.9
Silver	mg/kg	160		7.9	< 0.56	< 0.60	< 0.55	< 0.58	< 0.58
Thallium	mg/kg	3		0.89	--	--	--	--	--
Zinc	mg/kg	8700		3000	--	--	--	--	--
TCLP Metals									
Lead	mg/l				< 0.075	--	--	--	--
Mercury	mg/l				--	--	--	--	--
Semivolatile Organic Compounds									
2-Chloronaphthalene	mg/kg				< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
2-Methylnaphthalene	mg/kg	100			< 0.37	< 0.39	< 0.39	17	17
Acenaphthene	mg/kg	1200		81	< 0.37	< 0.39	< 0.39	1.8	1.8
Acenaphthylene	mg/kg			NA	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Anthracene	mg/kg	7880		1300	< 0.37	< 0.39	< 0.39	0.59	0.59
Benzo(g,h,i)perylene	mg/kg			NA	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Fluoranthene	mg/kg	1080		670	0.46	< 0.39	< 0.39	< 0.38	< 0.38
Fluorene	mg/kg	850		110	< 0.37	< 0.39	< 0.39	3.7	3.7
Naphthalene	mg/kg	10		4.5	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Phenanthrene	mg/kg			NA	< 0.37	< 0.39	< 0.39	8.1	8.1
Pyrene	mg/kg	890		440	0.52	< 0.39	< 0.39	0.77	0.77
Benz(a)anthracene	mg/kg	T		T	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Benzo(a)pyrene	mg/kg	T		T	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Benzo(b)fluoranthene	mg/kg	T		T	0.37	< 0.39	< 0.39	< 0.38	< 0.38
Benzo(k)fluoranthene	mg/kg	T		T	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Chrysene	mg/kg	T		T	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Dibenz(a,h)anthracene	mg/kg	T		T	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Indeno(1,2,3-cd)pyrene	mg/kg	T		T	< 0.37	< 0.39	< 0.39	< 0.38	< 0.38
Effective Date		March 2020							
B(a)P Equivalent, non-detects at 1/2, 2002 PEFs	mg/kg	2 TB		1.4 T	0.38	0.38	0.38	0.37	0.37
Total Petroleum Hydrocarbons									
Diesel Range Organics, silica gel cleanup	mg/kg		100		15	< 7.2	< 6.7	2600 h 3300	2600 h 3300
Gasoline Range Organics, C6-C10	mg/kg		100		--	--	--	19	19

Table 1b
Soil Analytical Data Summary
VOCs
Irving Ave Sewer Replacement Project
Minneapolis, Minnesota

				Location Date Depth Sample Type	GP-19-10 11/26/2019 5 - 6.5 ft N
Parameter	Analysis Location	Units	MPCA Tier 1 Residential Soil Reference Values	MPCA Screening Soil Leaching Values	
Effective Date			06/22/2009	06/01/2013	
Exceedance Key			No Exceed	Bold	
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane	Lab	mg/kg	31	0.41	< 0.25
1,1,1-Trichloroethane	Lab	mg/kg	140	56	< 0.25
1,1,2,2-Tetrachloroethane	Lab	mg/kg	3.5	0.012	< 0.25
1,1,2-Trichloroethane	Lab	mg/kg	9	0.014	< 0.25
1,1-Dichloroethane	Lab	mg/kg	34	0.41	< 0.25
1,1-Dichloroethylene	Lab	mg/kg	20	1.4	< 0.25
1,1-Dichloropropene	Lab	mg/kg			< 0.25
1,2,3-Trichlorobenzene	Lab	mg/kg			< 0.62
1,2,3-Trichloropropane	Lab	mg/kg		0.27	< 0.25
1,2,4-Trichlorobenzene	Lab	mg/kg	200	0.23	< 0.62
1,2,4-Trimethylbenzene	Lab	mg/kg	8	2.7	< 0.25
1,2-Dibromo-3-chloropropane (DBCP)	Lab	mg/kg			< 0.62
1,2-Dibromoethane (EDB)	Lab	mg/kg	0.3	0.000015	< 0.25
1,2-Dichlorobenzene	Lab	mg/kg	26	11	< 0.25
1,2-Dichloroethane	Lab	mg/kg	4	0.0038	< 0.25
1,2-Dichloroethylene, cis	Lab	mg/kg	8	0.21	< 0.25
1,2-Dichloroethylene, trans	Lab	mg/kg	11	0.42	< 0.25
1,2-Dichloropropane	Lab	mg/kg	4	0.024	< 0.25
1,3,5-Trimethylbenzene	Lab	mg/kg	3	2.7	< 0.25
1,3-Dichlorobenzene	Lab	mg/kg	26	10	< 0.25
1,3-Dichloropropane	Lab	mg/kg			< 0.25
1,3-Dichloropropene, cis	Lab	mg/kg		0.011 DCP	< 0.25
1,3-Dichloropropene, trans	Lab	mg/kg		0.011 DCP	< 0.25
1,4-Dichlorobenzene	Lab	mg/kg	30	0.17	< 0.25
2,2-Dichloropropane	Lab	mg/kg			< 0.25
Acetone	Lab	mg/kg	340	8.4	< 1.2
Allyl chloride	Lab	mg/kg		0.15	< 0.25
Benzene	Lab	mg/kg	6	0.017	< 0.25
Bromobenzene	Lab	mg/kg			< 0.25
Bromochloromethane	Lab	mg/kg		0.28	< 0.25
Bromodichloromethane	Lab	mg/kg	10	0.021	< 0.25
Bromoform	Lab	mg/kg	370	0.13	< 0.25
Bromomethane	Lab	mg/kg	0.7	0.036	< 0.25
Butylbenzene	Lab	mg/kg	30	NA	< 0.25
Butylbenzene, sec	Lab	mg/kg	25	NA	< 0.25
Butylbenzene, tert	Lab	mg/kg	30	NA	< 0.25
Carbon tetrachloride	Lab	mg/kg	0.3	0.0077	< 0.25
Chlorobenzene	Lab	mg/kg	11	1.2	< 0.25
Chlorodibromomethane	Lab	mg/kg	12	0.034	< 0.25
Chloroethane	Lab	mg/kg	1000	NA	< 0.25
Chloroform	Lab	mg/kg	2.5	0.11	< 0.25
Chloromethane	Lab	mg/kg	8	0.11	< 0.25
Chlorotoluene, o	Lab	mg/kg	436		< 0.25
Chlorotoluene, p	Lab	mg/kg			< 0.25
Cumene (isopropyl benzene)	Lab	mg/kg	30	9.5	< 0.25
Cymene p- (toluene isopropyl p-)	Lab	mg/kg			< 0.25
Dibromomethane (methylene bromide)	Lab	mg/kg	260		< 0.25
Dichlorodifluoromethane (Freon-12)	Lab	mg/kg	16	37	< 0.25
Dichlorofluoromethane (Freon-21)	Lab	mg/kg		NA	< 0.25
Ethyl benzene	Lab	mg/kg	200	1.0	< 0.25
Ethyl ether	Lab	mg/kg		0.51	< 0.25
Hexachlorobutadiene	Lab	mg/kg	6	0.037	< 0.62
Methyl ethyl ketone (2-butanone)	Lab	mg/kg	5500	8.8	< 1.2
Methyl isobutyl ketone (MIBK)	Lab	mg/kg	1700	0.76	< 0.25
Methyl tertiary butyl ether (MTBE)	Lab	mg/kg		NA	< 0.25
Methylene chloride	Lab	mg/kg	97	0.017	< 0.62

Table 1b
Soil Analytical Data Summary
VOCs
Irving Ave Sewer Replacement Project
Minneapolis, Minnesota

					Location Date Depth Sample Type	GP-19-10 11/26/2019 5 - 6.5 ft N
Parameter	Analysis Location	Units	MPCA Tier 1 Residential Soil Reference Values	MPCA Screening Soil Leaching Values		
Effective Date			06/22/2009	06/01/2013		
Exceedance Key			No Exceed	Bold		
Naphthalene	Lab	mg/kg	10	4.5	< 0.62	
Propylbenzene	Lab	mg/kg	30	NA	< 0.25	
Styrene	Lab	mg/kg	210	2.0	< 0.25	
Tetrachloroethylene	Lab	mg/kg	72	0.042	< 0.25	
Tetrahydrofuran	Lab	mg/kg		0.24	< 1.2	
Toluene	Lab	mg/kg	107	2.5	< 0.25	
Trichloroethylene (TCE)	Lab	mg/kg	29	0.0023	< 0.25	
Trichlorofluoromethane (Freon-11)	Lab	mg/kg	67	35	< 0.25	
Trichlorotrifluoroethane (Freon 113)	Lab	mg/kg	3745	17000	< 0.25	
Vinyl chloride	Lab	mg/kg	0.8	0.0014	< 0.25	
Xylene, m & p	Lab	mg/kg	M	M	< 0.50	
Xylene, o	Lab	mg/kg	M	M	< 0.25	
Xylenes, total	Err Calculati	mg/kg	45 M	5.4 M	ND	

Table 2
Groundwater Analytical Data Summary
Irving Ave Sewer Replacement
Minneapolis, Minnesota

						Location	GP-19-08
						Date	11/26/2019
						Sample Type	N
Parameter	Units	Minnesota Surface Water 2B Chronic Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Maximum Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Final Acute Value 7050 *Hardness=200 mg/L	MCES Pre-Treatment Standards		
Effective Date		01/24/2012	01/24/2012	01/24/2012	February 2013		
Exceedance Key		Bold	<i>Italic</i>	<u>Underline</u>	Shade		
General Parameters							
Chemical Oxygen Demand	mg/l						3100
Hardness, as CaCO3	mg/l						3100
Oil and Grease	mg/l						< 4.8
Solids, total suspended	mg/l						33000
Dissolved Metals							
Arsenic	mg/l	0.053	0.36	0.72			< 0.020 h
Barium	mg/l						0.21 h
Cadmium	mg/l	0.002 HD	0.073 HD	0.146 HD	1.0		< 0.0010 h
Chromium	mg/l	0.011 CR6	0.016 CR6	0.032 CR6	6.0		< 0.010 h
Lead	mg/l	0.0077 HD	0.197 HD	0.396 HD	1.0		< 0.015 h
Mercury	mg/l	0.0000069	0.0024 (1)	0.0049 (1)	0.002		< 0.010 h
Selenium	mg/l	0.0050	0.02	0.04			< 0.050 h
Silver	mg/l	0.001	0.0067 HD	0.013 HD			< 0.010 h
Total Metals							
Antimony	mg/l	0.031	0.090	0.180			--
Arsenic	mg/l	0.053	0.36	0.72			0.33
Barium	mg/l						9.7
Beryllium	mg/l						--
Cadmium	mg/l	0.002 HD	0.073 HD	0.146 HD	1.0		0.020
Calcium	mg/l						830
Chromium	mg/l	0.011 CR6	<i>0.016 CR6</i>	<u>0.032 CR6</u>	6.0		0.69
Copper	mg/l	0.015 HD	<i>0.034 HD</i>	<u>0.068 HD</u>	4.0		--
Lead	mg/l	0.0077 HD	<i>0.197 HD</i>	<u>0.396 HD</u>	1.0		2.6
Magnesium	mg/l						250
Mercury	mg/l	0.0000069	0.0024 (1)	0.0049 (1)	0.002		< 0.010
Nickel	mg/l	.283	2.55	5.1	6.0		--
Selenium	mg/l	0.0050	0.02	0.04			< 0.050
Silver	mg/l	0.001	0.0067 HD	0.013 HD			< 0.010
Thallium	mg/l	0.00056	<i>0.064</i>	<u>0.128</u>			--
Zinc	mg/l				6.0		--
Semivolatile Organic Compounds							
2-Chloronaphthalene	ug/l						< 10
2-Methylnaphthalene	ug/l						< 10
Acenaphthene	ug/l	20	56	112			< 10
Acenaphthylene	ug/l						< 10
Anthracene	ug/l	0.035	0.32	0.63			< 10
Benz(a)anthracene	ug/l						< 10
Benzo(a)pyrene	ug/l						< 10
Benzo(b)fluoranthene	ug/l						< 10
Benzo(g,h,i)perylene	ug/l						< 10
Benzo(k)fluoranthene	ug/l						< 10
Chrysene	ug/l						< 10
Dibenz(a,h)anthracene	ug/l						< 10
Fluoranthene	ug/l	1.9	3.5	6.9			< 10
Fluorene	ug/l						< 10
Indeno(1,2,3-cd)pyrene	ug/l						< 10
Naphthalene	ug/l	81	409	818			< 10
Phenanthrene	ug/l	3.6	32	64			< 10
Pyrene	ug/l						10
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/l						< 1.0
1,1,1-Trichloroethane	ug/l	329	2957	5913			< 1.0
1,1,2,2-Tetrachloroethane	ug/l	13	1127	2253			< 1.0
1,1,2-Trichloroethane	ug/l						< 1.0
1,1-Dichloroethane	ug/l						< 1.0
1,1-Dichloroethylene	ug/l						< 1.0
1,1-Dichloropropene	ug/l						< 1.0
1,2,3-Trichlorobenzene	ug/l						< 5.0
1,2,3-Trichloropropane	ug/l						< 2.5

Table 2
Groundwater Analytical Data Summary
Irving Ave Sewer Replacement
Minneapolis, Minnesota

						Location Date Sample Type	GP-19-08 11/26/2019 N
Parameter	Units	Minnesota Surface Water 2B Chronic Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Maximum Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Final Acute Value 7050 *Hardness=200 mg/L	MCES Pre- Treatment Standards		
Effective Date		01/24/2012	01/24/2012	01/24/2012	February 2013		
Exceedance Key		Bold	<i>Italic</i>	<u>Underline</u>	Shade		
1,2,4-Trichlorobenzene	ug/l						< 5.0
1,2,4-Trimethylbenzene	ug/l						< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	ug/l						< 5.0
1,2-Dibromoethane (EDB)	ug/l						< 2.5
1,2-Dichlorobenzene	ug/l						< 1.0
1,2-Dichloroethane	ug/l	190	45050 (1)	90100 (1)			< 1.0
1,2-Dichloroethylene, cis	ug/l						< 1.0
1,2-Dichloroethylene, trans	ug/l						< 1.0
1,2-Dichloropropane	ug/l						< 1.0
1,3,5-Trimethylbenzene	ug/l						< 1.0
1,3-Dichlorobenzene	ug/l						< 1.0
1,3-Dichloropropane	ug/l						< 1.0
1,3-Dichloropropene, cis	ug/l						< 1.0
1,3-Dichloropropene, trans	ug/l						< 1.0
1,4-Dichlorobenzene	ug/l						< 1.0
2,2-Dichloropropane	ug/l						< 5.0
Acetone	ug/l						< 20
Allyl chloride	ug/l						< 5.0
Benzene	ug/l	98	4487	8974			< 1.0
Bromobenzene	ug/l						< 1.0
Bromochloromethane	ug/l						< 1.0
Bromodichloromethane	ug/l						< 1.0
Bromoform	ug/l	466	2900	5800			< 5.0
Bromomethane	ug/l						< 5.0
Butylbenzene	ug/l						< 2.5
Butylbenzene, sec	ug/l						< 1.0
Butylbenzene, tert	ug/l						< 1.0
Carbon tetrachloride	ug/l	5.9	1750 (1)	3500 (1)			< 1.0
Chlorobenzene	ug/l	20	423	846			< 1.0
Chlorodibromomethane	ug/l						< 2.5
Chloroethane	ug/l						< 2.5
Chloroform	ug/l	155	1392	2784			< 1.0
Chloromethane	ug/l						< 2.5
Chlorotoluene, o	ug/l						< 1.0
Chlorotoluene, p	ug/l						< 1.0
Cumene (isopropyl benzene)	ug/l						< 1.0
Cymene p- (toluene isopropyl p-)	ug/l						< 2.5
Dibromomethane (methylene bromide)	ug/l						< 2.5
Dichlorodifluoromethane (Freon-12)	ug/l						< 5.0
Dichlorofluoromethane (Freon-21)	ug/l						< 1.0
Ethyl benzene	ug/l	68	1859	3717			< 1.0
Ethyl ether	ug/l						< 5.0
Hexachlorobutadiene	ug/l						< 10
Methyl ethyl ketone (2-butanone)	ug/l						< 20
Methyl isobutyl ketone (MIBK)	ug/l						< 5.0
Methyl tertiary butyl ether (MTBE)	ug/l						< 1.0
Methylene chloride	ug/l	1940	13875	27749			< 5.0
Naphthalene	ug/l	81	409	818			< 5.0
Propylbenzene	ug/l						< 1.0
Styrene	ug/l						< 1.0
Tetrachloroethylene	ug/l	8.9	428	857			< 1.0
Tetrahydrofuran	ug/l						< 20
Toluene	ug/l	253	1352	2703			< 1.0
Trichloroethylene (TCE)	ug/l	120	6988	13976			< 1.0
Trichlorofluoromethane (Freon-11)	ug/l						< 1.0
Trichlorotrifluoroethane (Freon 113)	ug/l						< 1.0
Vinyl chloride	ug/l	9.2	(1)	(1)			< 1.0
Xylene, m & p	ug/l						< 2.0
Xylene, o	ug/l						< 1.0
Xylene, total	ug/l	166	1407	2814			ND
Total Petroleum Hydrocarbons							

Table 2
Groundwater Analytical Data Summary
Irving Ave Sewer Replacement
Minneapolis, Minnesota

						Location	GP-19-08
						Date	11/26/2019
						Sample Type	N
Parameter	Units	Minnesota Surface Water 2B Chronic Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Maximum Standard 7050 *Hardness=200 mg/L	Minnesota Surface Water 2B Final Acute Value 7050 *Hardness=200 mg/L	MCES Pre-Treatment Standards		
Effective Date		01/24/2012	01/24/2012	01/24/2012	February 2013		
Exceedance Key		Bold	<i>Italic</i>	<u>Underline</u>	Shade		
Gasoline Range Organics, C6-C10	ug/l						< 100
Diesel Range Organics, silica gel clear	ug/l						370

* Reference:
Average hardness value from 2016-2017 MCES Watershed Outlet Monitoring Program



SUBSURFACE BORING LOG

AET No: **01-20383** Log of Boring No. **B-19-05 (p. 1 of 3)**
 Project: **Irving Avenue/Bryn Mawr Sewer Improvements; Minneapolis, MN**
 Surface Elevation **812.4** Hennepin Co. Coordinates: **N 166866** **E 521761**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS						
							WC	DEN	LL	PL	%-#200		
1	FILL, mostly clayey sand, a little silty sand and gravel, trace roots, dark brown to brown	FILL	10	M	SS	22	13						
2													
3													
4			4	M	SS	18	22						
5	FILL, mostly clayey sand with organic fines, trace roots, dark brown, a little gray		3	M	SS	2	28						
6													
7													
8	ORGANIC CLAY WITH SAND, trace roots and shells, dark grayish brown (OH)	SWAMP DEPOSIT	3	M	SS	24	94						
9													
10													
11			3	M	SS	24	129						
12	ORGANIC CLAY, trace shells, dark grayish brown (OH)		5	M	SS	24	93						
13													
14													
15			4	M	SS	24							
16													
17			2	M	SS	24	123						
18	ORGANIC CLAY, dark brownish gray, soft to very soft (OH)		3	M	SS	24	94						
19													
20													
21			2	M	SS	24	99						
22													
23			4	M	SS	10	99						
24	FAT CLAY, gray, very soft (CH)	FINE ALLUVIUM	2	M	SS	24	111						
25													
26			2	M	SS	24	94						
27													
28			WH	M	SS	24	94						
29													
30	FAT CLAY, gray, very soft (CH)	FINE ALLUVIUM	WR	M	SS	24	110						
31													
32													
33													
34													
35													
36	FAT CLAY, gray, very soft (CH)	FINE ALLUVIUM	WH	M	SS	24	74						
37													
38													
39													
40													
41													
42	FAT CLAY, gray, very soft (CH)	FINE ALLUVIUM	WR	M	SS	24	59						
43													
44													
45													
46													
47													
48													
49													

DEPTH: 0-74½'	DRILLING METHOD: 3.25" HSA	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
74½'-139½'	RDF w/DM	11/26/19	9:55	29.0	27.0	27.0		26.5	
BORING COMPLETED: 11/26/19									
DR: GH LG: SB Rig: 41C									

AET_CORP-W-COORDINATES 01-20383.GPJ AET+CPT+WELL_20181012_JG.GDT 1/15/20



SUBSURFACE BORING LOG

AET No: **01-20383** Log of Boring No. **B-19-05 (p. 2 of 3)**
 Project: **Irving Avenue/Bryn Mawr Sewer Improvements; Minneapolis, MN**
 Hennepin Co. Coordinates: **N 166866 E 521761**

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	%-#200	
51	FAT CLAY, gray, very soft (CH) <i>(continued)</i>	FINE ALLUVIUM <i>(continued)</i>	WR	M	SS	24	77					
52												
53												
54												
55												
56					WR	M	SS	24	82			
57												
58												
59												
60			WR	M	SS	24	79					
61												
62												
63												
64												
65			WR	M	SS	24	73					
66												
67												
68	CLAYEY SAND, a little gravel, gray, very soft (SC)	TILL										
69												
70												
71					2	M	SS	16	25			
72												
73	FAT CLAY, gray, very soft to stiff (CH) ("WR" sample appeared stiff)	FINE ALLUVIUM										
74												
75												
76					WR	M	SS	22	36			
77												
78												
79												
80												
81			10	M	SS	18	42					
82												
83												
84												
85												
86			13	M	SS	18	42					
87	CLAYEY SAND, a little gravel, gray to brown, very stiff (SC)	TILL										
88												
89												
90					27	M	SS	16	25			
91												
92												
93												
94												
95	SAND WITH SILT, a little gravel, fine to medium grained, gray, waterbearing, medium dense (SP-SM)	COARSE ALLUVIUM										
96												
97					33	W	SS	14	16			
98												
99												
100					14	W	SS	18				
101												
102												
103												
104												
105												
106			27	W	SS	8						
107												
108												

AET_CORP-W-COORDINATES 01-20383.GPJ AET+CPT+WELL_20181012_JG.GDT 1/15/20



SUBSURFACE BORING LOG

AET No: 01-20383 Log of Boring No. B-19-05 (p. 3 of 3)
 Project: Irving Avenue/Bryn Mawr Sewer Improvements; Minneapolis, MN
 Hennepin Co. Coordinates: N 166866 E 521761

DEPTH IN FEET	MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	%-#200
110	SAND WITH SILT, a little gravel, fine to medium grained, gray, waterbearing, medium dense (SP-SM) (continued)	COARSE ALLUVIUM (continued)	21	W	SS	10					
111											
112											
113											
114											
115	SAND WITH SILT, fine grained, gray, waterbearing, dense (SP-SM)		22	W	SS	15					
116											
117											
118											
119											
120	SAND WITH SILT, fine grained, gray, waterbearing, dense (SP-SM)		50	W	SS	10					
121											
122											
123											
124											
125	SILTY SAND, fine grained, gray, wet, dense (SM)		38	W	SS	14					
126											
127											
128											
129											
130	END OF BORING										
131											
132											
133											
134											
135											
136											
137											
138											
139											
140											
141											

AET_CORP W-COORDINATES 01-20383.GPJ AET+CPT+WELL_20181012_JG.GDT 1/15/20



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

BORING:

SHEET ___ OF ___

Project: Irving Ave Surface Elevation: _____
 Project No.: 23271956 Drilling Method: Push-probe
 Location: _____ Sampling Method: swd-tube
 Coordinates: _____ Completion Depth: _____
 Coordinate System: _____

1" = 0.0833'; 2" = 0.1667'; 3" = 0.2500'; 4" = 0.3333'; 5" = 0.4167'; 6" = 0.5000'; 7" = 0.5833'; 8" = 0.6667'; 9" = 0.7500'; 10" = 0.8333'; 11" = 0.9167'; 12" = 1.0000'; 13" = 1.0833'; 14" = 1.1667'; 15" = 1.2500'; 16" = 1.3333'; 17" = 1.4167'; 18" = 1.5000'

Depth, feet (write-in)	Sample Interval	Sample No.	Recovery	PID	Disc./Odor/Sheen	USCS Symbol	Depth Interval, feet	LITHOLOGY & INCLUSIONS
0-2				0.3	N/N/N		0-2.3: Topsoil, sandy silty clay, brown L plast.	
2-5	0-5	1	2.2	0.3	N/N/N		1.3-10.25: PG sand, brown, f-mg, little fg gravel black SM lens @ 2' gray @ 6.5'	
5-10		2	2.6	0.3	N/N/N			
10-12				0.2	N/N/N		10.25-14: Organic clay, brn-gray, fibrous, w/ small shells	
12-15	10-15	3	0.5					
15-18		4	2.4	0.5	N/N/N			
18-20							Screened from 3'-18' bgs W.L. @ 4.1' bgs sample @ 12:00	

Date/Time Started: 11/26/15 11:40
 Date/Time Completed: _____
 Logged By: ARL
 Drilling Contractor: Dekota
 Drill Rig: geoprobe
 Weather: 35°F

Remarks: 1.5-10 @ 12:10



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

BORING:

SHEET ___ OF ___

Project: Irving Ave Surface Elevation: _____
 Project No.: 23271756 Drilling Method: Push-probe
 Location: _____ Sampling Method: Dual-tube
 Coordinates: _____ Completion Depth: _____
 Coordinate System: _____

1" = 0.0833'; 2" = 0.1667'; 3" = 0.2500'; 4" = 0.3333'; 5" = 0.4167'; 6" = 0.5000'; 7" = 0.5833'; 8" = 0.6667'; 9" = 0.7500'; 10" = 0.8333'; 11" = 0.9167'; 12" = 1.0000'; 13" = 1.0833'; 14" = 1.1667'; 15" = 1.2500'; 16" = 1.3333'; 17" = 1.4167'; 18" = 1.5000'

Depth, feet (write-in)	Sample Interval	Sample No.	Recovery	PID	Disc./Odor/Sheen	USCS Symbol	Depth Interval, feet	LITHOLOGY & INCLUSIONS
				0.2	N/N/N	ML	0-0.6	Topsoil, brown sandy silty clay
2	0-5	1	2.6	0.2	N/N/N	SM	1-5.5	Silty Sand, brown, fine, few fg gravel
4				0.2	N/N/N	PT	5.5-6.0	peat, black, fibrous
6	5-10	2	2.8	0.3	N/N/N	CL/OL	6-12	Organic lean clay, fibrous w/ small shells, lt gray, h-m plasticity
8				0.3	N/N/N	CL	12-18	lean clay, gray, v. soft, m-h plast.
10	10-15	3	2.1	0.3	N/N/N			
12				0.1	N/N/N			
14	15-18	4	2.2	0.1	N/N/N			
16								
18								
20								

Date/Time Started: 4/25/15
 Date/Time Completed: _____
 Logged By: ARPZ
 Drilling Contractor: Dakota
 Drill Rig: geoprobe
 Weather: 35°F

Remarks: sample (1-5.5) @ 12:50

Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

BORING:

SHEET 1 OF 1

Project: Ironway Ave. Phase II
 Project No.: 23271756
 Location:
 Coordinates:
 Coordinate System:

Surface Elevation:
 Drilling Method: DPT
 Sampling Method: Composite
 Completion Depth:

1" = 0.083'; 2" = 0.167'; 3" = 0.250'; 4" = 0.333'; 5" = 0.417'; 6" = 0.500'; 7" = 0.583'; 8" = 0.667'; 9" = 0.750'; 10" = 0.833'; 11" = 0.917'; 12" = 1.000'; 13" = 1.083'; 14" = 1.167'; 15" = 1.250'; 16" = 1.333'; 17" = 1.417'; 18" = 1.500'

Depth, feet (write-in)	Sample Interval	Sample No.	Recovery	PID	Disc./Odor/Sheen	USCS Symbol	Depth Interval, feet	LITHOLOGY & INCLUSIONS
0				2.1	N/N/N	SM	0-3	Silty sand, mottled brown-yellow, sand is fg-cg, trace coarse gravel (FILL)
5		1	2.4	23.6	N/Y/N		@ 2'	transition to gray silty sand, loose homogeneous, slight odor
10		2	2.6	137*	N/Y/Y	SP-SM	3-6'	Silty sand, mg, homogeneous, loose fines downward, strong petroleum odors, moderate sheen.
15		3	4.3	24.8	N/Y/Y	PT	@ 5.5'	fg poorly graded sand
20		4	2'	0.6	N/N/N	CL	6.5-7.5'	Sapric Peat, soft, black, moderate petroleum odor
				0.3	N/N/N	CL	7-16'	Lean clay, very soft, gray, mod plasticity, abundant small white shells, with fg sand
							10-12.5'	decrease in shell content, <u>very</u> soft, thin laminations
							12.5-16'	increase in shell content and fg sand trace fibric roots, dark gray
							16-20'	Sandy ^{lean} clay, soft, no shells, ~ 1/2 cm color laminations (brown + gray), fg sand, trace very fine roots
								EOB @ 20'

[NATIVE] at 6.5'

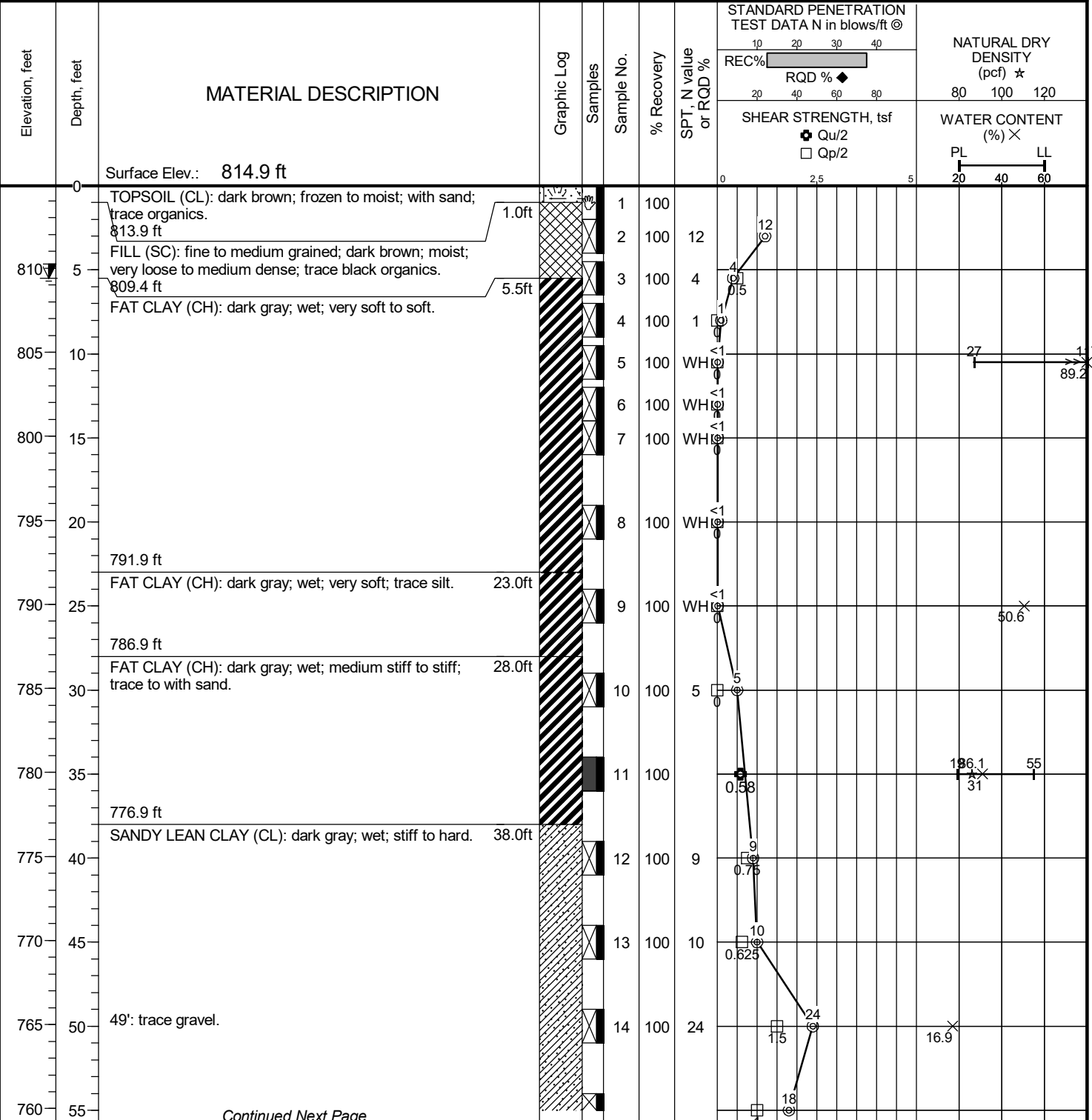
Date/Time Started: 11/26
 Date/Time Completed: 11/26
 Logged By: AKS
 Drilling Contractor: Dakota
 Drill Rig: Track Geoprobe
 Weather: Cloudy ~35

Remarks: 5-6.5 @ 13:45

**Table 2
Summary of PID Readings**

Investigation ID	Depth [ft]	PID Reading [ppm]
SB1	2-4	0.1
	4.5-6.5	0
	7-9	0.5
SB2	2-4	6.7
	4.5-6.5	9.1
	7-9	2.5
	9.5-11.5	4.3
	12-14	2.2
SB3	2-4	0.1
	4.5-6.5	0.7
	7-9	0.1
	9.5-11.5	0.8
	12-14	1.4
SB4	2-4	0.1
	4-6	0.5
Mean		1.94
Standard Deviation		2.7
Minimum		0
Maximum		9.1

Project: Bryn Mawr Meadows Water Quality Improvement	Surface Elevation: 814.9 ft
Job No.: 23270051.41	Drilling Method: HSA/MRO
Location: Minneapolis, MN	Sampling Method: Split Spoon, Thinwall Tube
Coordinates: Lat: 44.97260° Long: -93.30217°	Completion Depth: 76.0 ft
Datum: NAD83	



Date Boring Started: 3/22/18 7:55 am	Water Levels (ft) At Time of Drilling 5.5	Remarks: Elevation data from Hennepin County 1 Meter LiDAR (2011). Weather: Overcast, 32F
Date Boring Completed: 3/22/18 1:00 pm		
Logged By: PJH3		
Drilling Contractor: STS Enterprises, LLC		
Drill Rig: CME 750		

M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

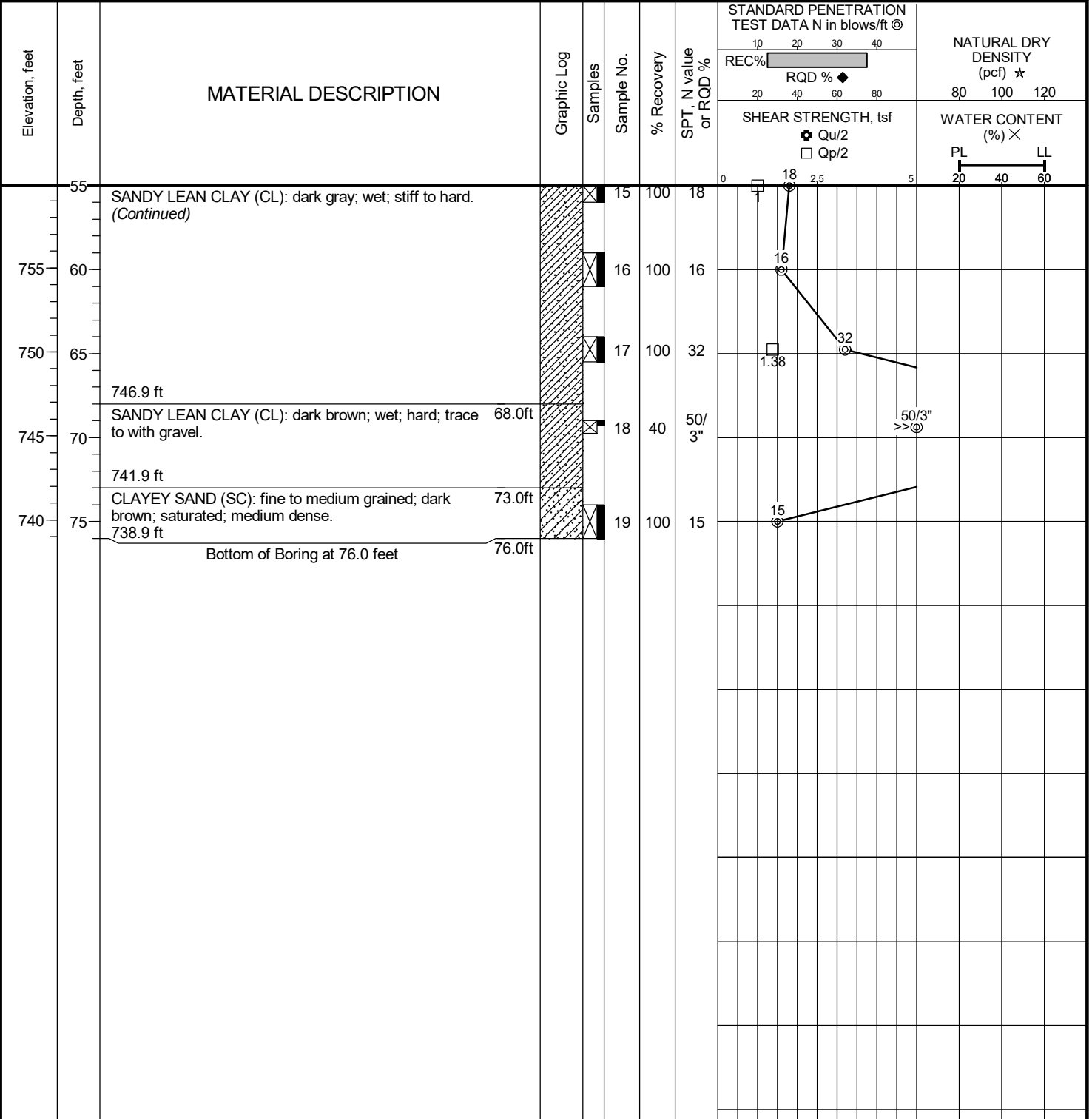


Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING SB1

Sheet 2 of 2

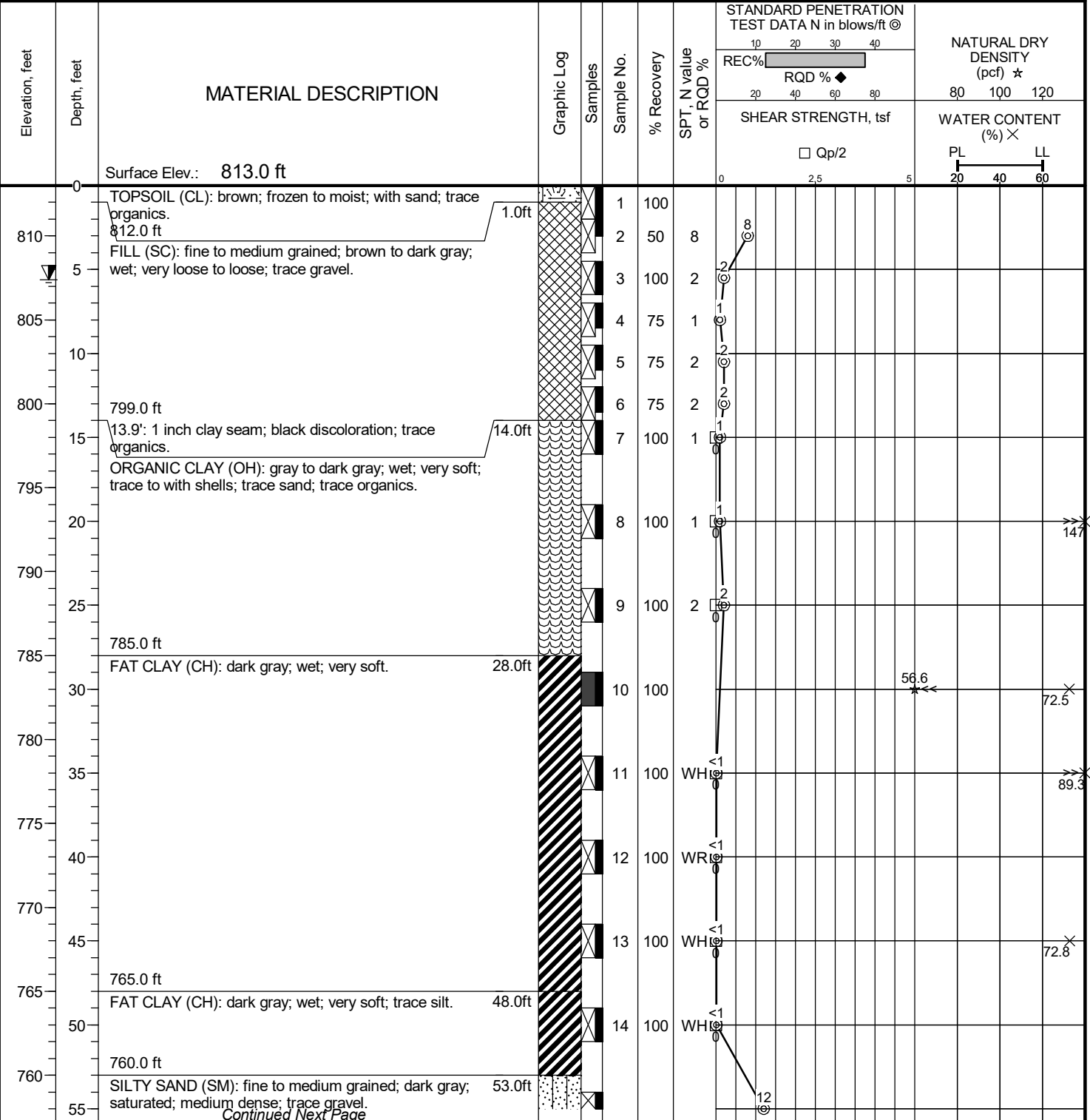
Project:	Bryn Mawr Meadows Water Quality Improvement	Surface Elevation:	814.9 ft
Job No.:	23270051.41	Drilling Method:	HSA/MRO
Location:	Minneapolis, MN	Sampling Method:	Split Spoon, Thinwall Tube
Coordinates:	Lat: 44.97260° Long: -93.30217°	Completion Depth:	76.0 ft
Datum:	NAD83		



M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

Date Boring Started:	3/22/18 7:55 am	Water Levels (ft)		Remarks: Elevation data from Hennepin County 1 Meter LiDAR (2011).
Date Boring Completed:	3/22/18 1:00 pm	At Time of Drilling	5.5	
Logged By:	PJH3			
Drilling Contractor:	STS Enterprises, LLC			
Drill Rig:	CME 750			
				Weather: Overcast, 32F

Project: Bryn Mawr Meadows Water Quality Improvement	Surface Elevation: 813.0 ft
Job No.: 23270051.41	Drilling Method: HSA/MRO
Location: Minneapolis, MN	Sampling Method: Split Spoon, Thinwall Tube
Coordinates: Lat: 44.97347° Long: -93.30161°	Completion Depth: 101.0 ft
Datum: NAD83	



Continued Next Page

Date Boring Started: 3/20/18 8:20 am	Water Levels (ft)	Remarks: Elevation data from Hennepin County 1 Meter LiDAR (2011).
Date Boring Completed: 3/20/18 3:00 pm	At Time of Drilling 5.6	
Logged By: PJH3		
Drilling Contractor: STS Enterprises, LLC		
Drill Rig: CME 750		Weather: Snow, 29F

M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

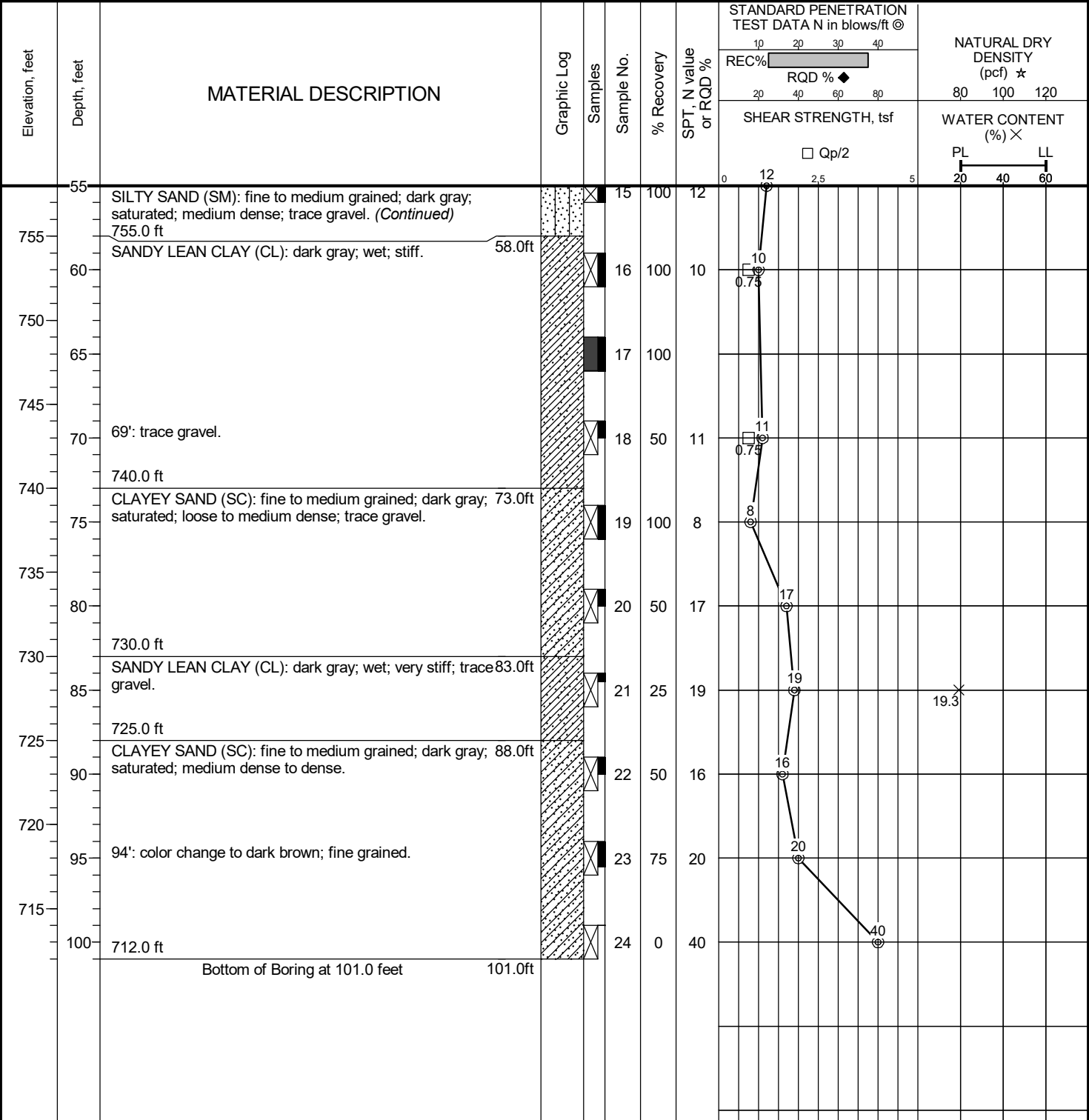


Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING SB2

Sheet 2 of 2

Project:	Bryn Mawr Meadows Water Quality Improvement	Surface Elevation:	813.0 ft
Job No.:	23270051.41	Drilling Method:	HSA/MRO
Location:	Minneapolis, MN	Sampling Method:	Split Spoon, Thinwall Tube
Coordinates:	Lat: 44.97347° Long: -93.30161°	Completion Depth:	101.0 ft
Datum:	NAD83		



Date Boring Started:	3/20/18 8:20 am	Water Levels (ft)		Remarks:	Elevation data from Hennepin County 1 Meter LiDAR (2011).
Date Boring Completed:	3/20/18 3:00 pm	At Time of Drilling	5.6	Weather:	Snow, 29F
Logged By:	PJH3				
Drilling Contractor:	STS Enterprises, LLC				
Drill Rig:	CME 750				

M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

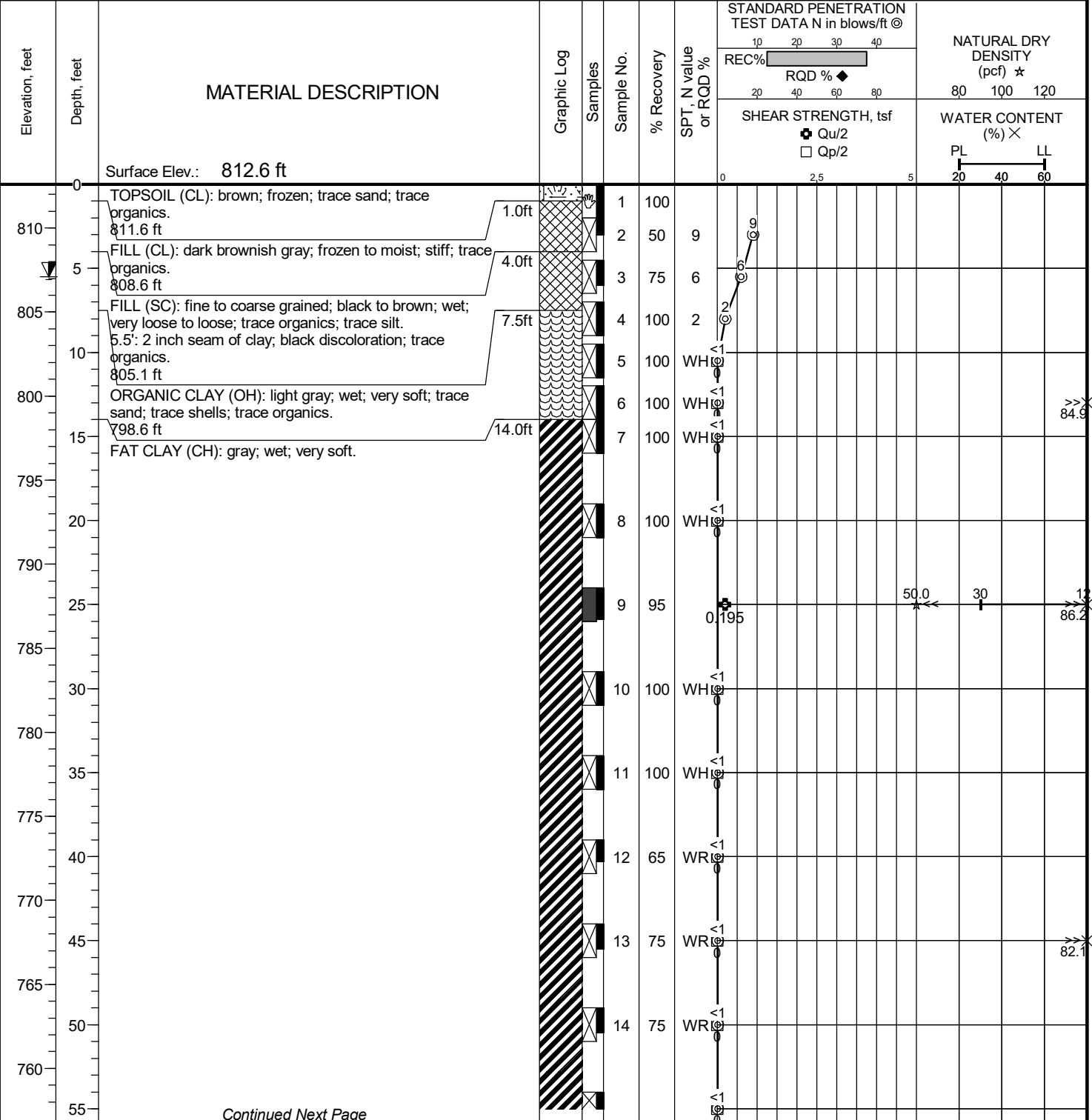


Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING SB3

Sheet 1 of 2

Project:	Bryn Mawr Meadows Water Quality Improvement	Surface Elevation:	812.6 ft
Job No.:	23270051.41	Drilling Method:	HSA/MRO
Location:	Minneapolis, MN	Sampling Method:	Split Spoon, Thinwall Tube
Coordinates:	Lat: 44.97394° Long: -93.30226°	Completion Depth:	101.0 ft
Datum:	NAD83		



Continued Next Page

Date Boring Started:	3/21/18 7:55 am	Water Levels (ft)		Remarks: Elevation data from Hennepin County 1 Meter LiDAR (2011).
Date Boring Completed:	3/21/18 2:05 pm	At Time of Drilling	5.5	
Logged By:	PJH3			
Drilling Contractor:	STS Enterprises, LLC			
Drill Rig:	CME 750			
				Weather: Overcast, 24F

M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

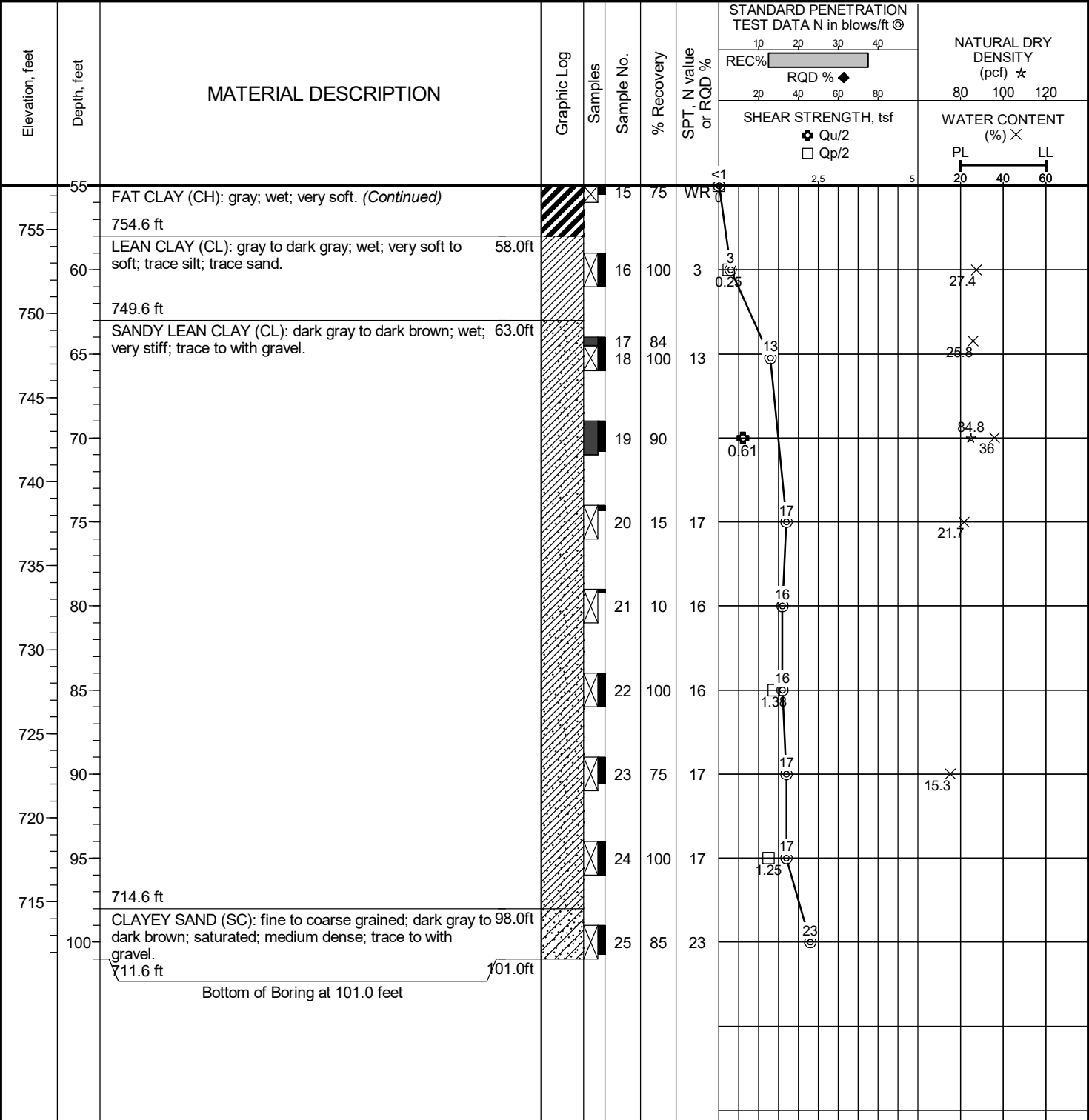


Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING SB3

Sheet 2 of 2

Project:	Bryn Mawr Meadows Water Quality Improvement	Surface Elevation:	812.6 ft
Job No.:	23270051.41	Drilling Method:	HSA/MRO
Location:	Minneapolis, MN	Sampling Method:	Split Spoon, Thinwall Tube
Coordinates:	Lat: 44.97394° Long: -93.30226°	Completion Depth:	101.0 ft
Datum:	NAD83		



M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

Date Boring Started:	3/21/18 7:55 am	Water Levels (ft)		Remarks:	Elevation data from Hennepin County 1 Meter LiDAR (2011).
Date Boring Completed:	3/21/18 2:05 pm	At Time of Drilling	5.5	Weather:	Overcast, 24F
Logged By:	PJH3				
Drilling Contractor:	STS Enterprises, LLC				
Drill Rig:	CME 750				

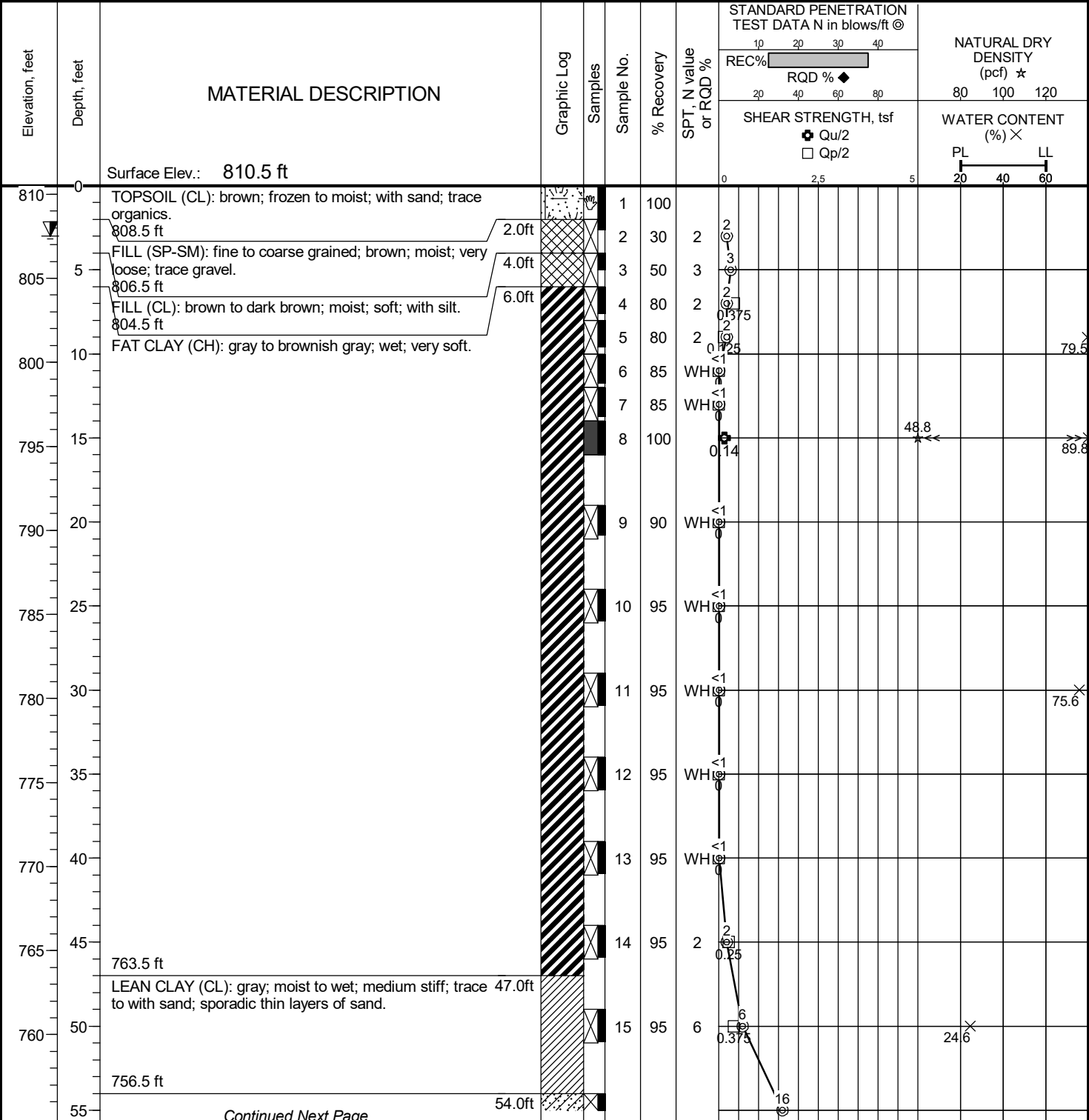


Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING SB4

Sheet 1 of 2

Project: Bryn Mawr Meadows Water Quality Improvement	Surface Elevation: 810.5 ft
Job No.: 23270051.41	Drilling Method: HSA/MRO
Location: Minneapolis, MN	Sampling Method: Split Spoon, Thinwall Tube
Coordinates: Lat: 44.97429° Long: -93.30223°	Completion Depth: 100.5 ft
Datum: NAD83	

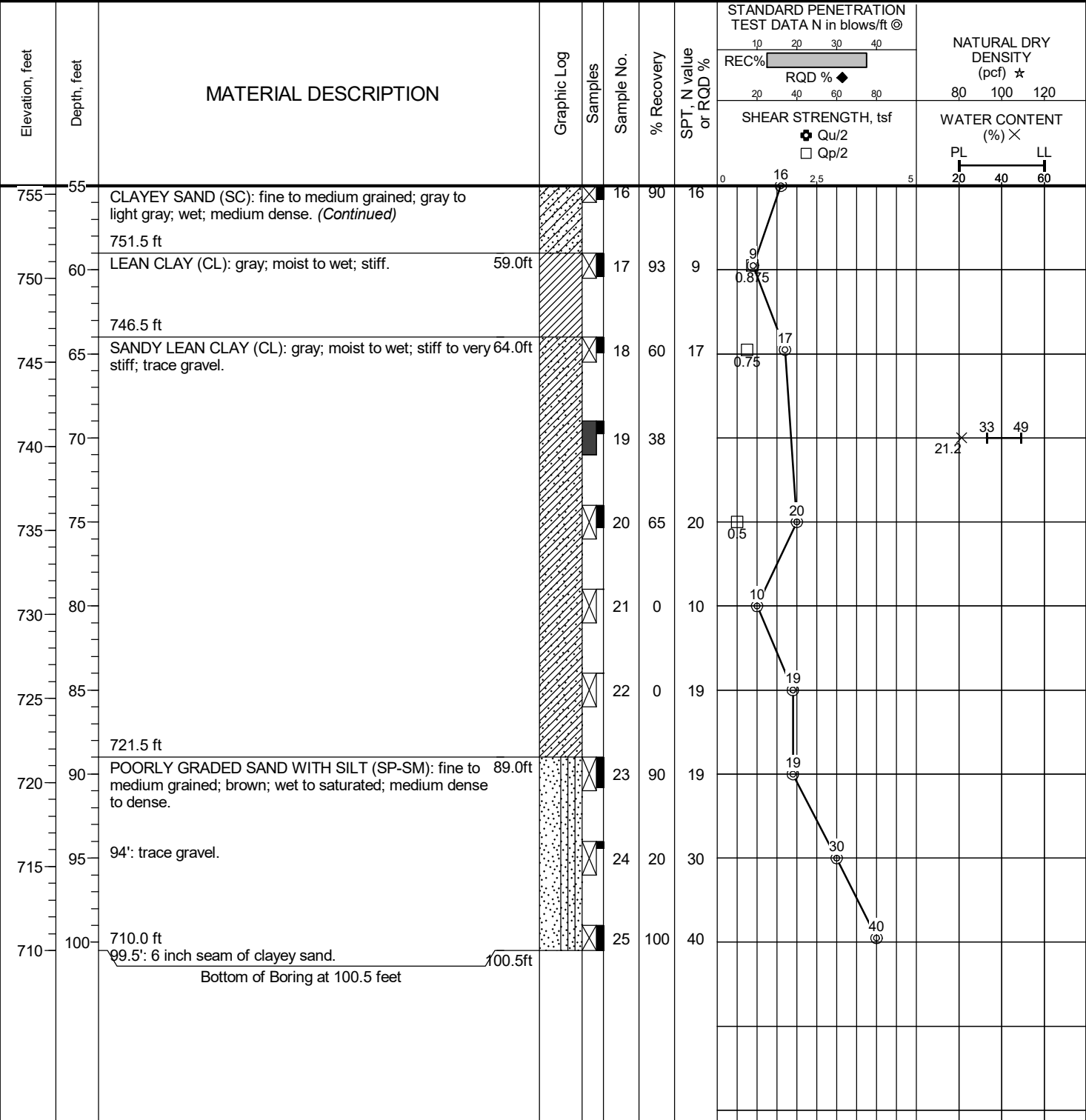


Continued Next Page

Date Boring Started: 3/19/18 9:00 am	Water Levels (ft)	Remarks: Elevation data from Hennepin County 1 Meter LiDAR (2011).
Date Boring Completed: 3/19/18 5:15 pm	At Time of Drilling 3.0	
Logged By: CJS		
Drilling Contractor: STS Enterprises, LLC		
Drill Rig: CME 750		
Weather: Overcast, 35F		

M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\LIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

Project: Bryn Mawr Meadows Water Quality Improvement	Surface Elevation: 810.5 ft
Job No.: 23270051.41	Drilling Method: HSA/MRO
Location: Minneapolis, MN	Sampling Method: Split Spoon, Thinwall Tube
Coordinates: Lat: 44.97429° Long: -93.30223°	Completion Depth: 100.5 ft
Datum: NAD83	



M:\GINT\PROJECTS\23270051.41_BRYN MAWR GEOTECH PRELIM.GPJ_BARR\BIBRARY.GLB_BOREHOLE LOG REPORT_BARR TEMPLATE.GDT

Date Boring Started: 3/19/18 9:00 am	Water Levels (ft) At Time of Drilling: 3.0	Remarks: Elevation data from Hennepin County 1 Meter LiDAR (2011). Weather: Overcast, 35F
Date Boring Completed: 3/19/18 5:15 pm		
Logged By: CJS		
Drilling Contractor: STS Enterprises, LLC		
Drill Rig: CME 750		

Attachment B

Boring and Test Excavation Logs



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-01-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 813.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980084.154m, E:476157.791m Completion Depth: 15.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSCS	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						ASPHALT.		
				SM		SILTY SAND (SM): light brown.	Fill	812.5
				CL		LEAN CLAY (CL): black; stiff; low plasticity.		
2.5		1	PID:0.0 D/O/S:None/ None/ None	SM		SILTY SAND (SM): fine grained. 1.7 - 2.4': dark brown. 2.4 - 3.3': orange brown with trace gray motteling.		810.0
				CL		LEAN CLAY (CL): gray; soft; medium plasticity.		
5.0				PT		PEAT (PT): sapric; soft; with white shells.		807.5
						LEAN CLAY (CL): gray; soft; with white shells.		
7.5		2	PID:0.1 D/O/S:None/ None/ None				Native	805.0
				CL				
10.0								802.5
						11.6': roots (mm).		
12.5		3	PID:0.3 D/O/S:None/ None/ None					800.0
15.0						End of boring 15.0 feet		797.5
17.5								795.0
20.0								

Date Boring Started: 7/6/20
 Date Boring Completed: 7/6/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Temporary well screen set 5-15' bgs
 Background PID: 0.0 ppm
 PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-02-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 812.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980101.628m, E:476187.187m Completion Depth: 15.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0					ASPHALT.		
				GM	SILTY GRAVEL (GM): fine grained; brown; loose; rounded; with little silt and fine to coarse sand.		
				SM	SILTY SAND (SM): fine to coarse grained; loose; fines downward.		
				SC	CLAYEY SAND (SC): medium grained; black; loose; trace fine gravel.		
2.5		1	PID:2.3 D/O/S:None/ None/ None	SM	SILTY SAND (SM): brown; trace fine gravel and concrete.	Fill	810.0
5.0				SM	SILTY SAND (SM): medium to coarse grained; gray; loose.		807.5
7.5		2	PID:0.1 D/O/S:None/ None/ None	CL	LEAN CLAY (CL): gray; soft; medium to high plasticity; little small white shells throughout.	Native	805.0
10.0				CL	10 - 15': No recovery. Driller notes soft clay would not stick to liner.		802.5
12.5		3					800.0
15.0					End of boring 15.0 feet		797.5
17.5							795.0
20.0							792.5

Date Boring Started: 7/6/20
 Date Boring Completed: 7/6/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-03-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 813.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980119.662m, E:476158.697m
 Datum: NAD 83 Completion Depth: 15.0 ft

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSSCU	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						ASPHALT.		
				SM		SILTY SAND (SM): fine to coarse grained; brown; dry to moist; with trace fine gravel.		812.5
						CONCRETE.		
2.5		1	PID:0.2 D/O/S:None/ None/ None	CL		LEAN CLAY (CL): brown-gray; dry to moist; with fine to coarse grained sand; low plasticity.	Fill	810.0
5.0				PT		From 5.4': color change to dark brown. PEAT (PT): sapric, with roots; black.		807.5
7.5		2	PID:4.1 D/O/S:None/ None/ None	CL		LEAN CLAY (CL): greenish gray; dry to moist; soft; high plasticity.		805.0
10.0				CL		From 8.3': color change to gray/dark gray.	Native	802.5
12.5		3	PID:8.8 D/O/S:None/ None/ None					800.0
15.0						End of boring 15.0 feet		797.5
17.5								795.0
20.0								

Date Boring Started: 7/6/20
 Date Boring Completed: 7/6/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-04-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 817.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4979971.322m, E:476239.274m Completion Depth: 10.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSCUC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL: grass and roots in a silty sand matrix.		
			PID:0.1 D/O/S:None/ None/ None	SM		SILTY SAND (SM): fine to coarse grained; light to dark brown; moist; loose; with little fine gravel; coarsens downward.		
2.5		1	PID:0.1 D/O/S:None/ None/ None			FILL: with brick debris, silty sand matrix; black; moist. At 3': light brown/white brick debris, some red brick intermixed.	815.0	
5.0			PID:0.1 D/O/S:None/ None/ None	SM		SILTY SAND/SANDY SILT (SM): fine to medium grained; dark gray; saturated; loose.	812.5	
7.5		2	PID:0.1 D/O/S:None/ None/ None	SM			810.0	
10.0						End of boring 10.0 feet	807.5	
12.5							805.0	
15.0							802.5	
17.5							800.0	
20.0							797.5	

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-04-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-05-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 814.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980110.113m, E:476313.092m Completion Depth: 10.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSCSU	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		
0.0 - 1.0			PID:0.1 D/O/S:None/ None/ None			FILL: silty sand matrix, lean clay intermixed; fine to medium grained; black to brown; moist; loose.		812.5
1.0 - 2.5		1		SM		SILTY SAND (SM): medium grained; brown; saturated; loose.		
2.5 - 3.5			PID:1.1	CL		SANDY LEAN CLAY (CL): soft; no discoloration, odor, or sheen; low plasticity.		
3.5 - 5.0				SP-SM		POORLY GRADED SAND WITH SILT (SP-SM): medium to coarse grained; gray; loose; light petroleum odor, heavy sheen, blackens with depth.	Fill	810.0
5.0 - 7.5			PID:0.9 D/O/S:Black/ Light/ Heavy					807.5
7.5 - 8.5		2		SM		SILTY SAND (SM): medium grained; black to gray; loose; light odor. From 7.5': light sheen.		
8.5 - 10.0			PID:0.3 D/O/S:None/ None/ None	SM		SILTY SAND (SM): black with red staining; no odor or sheen; moderate cementation; blocky.		805.0
10.0						End of boring 10.0 feet		802.5
12.5								800.0
15.0								797.5
17.5								795.0
20.0								

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-05-20.
 PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-05E-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation	Surface Elevation: 814.0 ft
Project No.: 23271806	Drilling Method: Direct Push
Location: Minneapolis, MN	Sampling Method: Discrete Macro Core
Coordinates: UTM 15 N:4980109.603m, E:476320.375m	Completion Depth: 10.0 ft
Datum: NAD 83	

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSCUC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		
1.0		1	PID:0.3 D/O/S:None/ None/ None			FILL: silty sand matrix; medium grained; brown; loose; trace coarse grained gravel. At 1': Charcoal.	Fill	812.5
2.5			PID:0.5 D/O/S:None/ None/ None	CL		At 2.3': Charcoal. SANDY LEAN CLAY (CL): medium stiff; no discoloration, odor, or sheen; low plasticity.		810.0
5.0			PID:0.5 D/O/S:Black/ Moderate/ None	SM		SILTY SAND (SM): fine to medium grained; black; trace fine grained gravel; moderate petroleum odor, no sheen; coarsens with depth.		807.5
7.5		2				From 7.5': little coarse grained gravel.		805.0
10.0			D/O/S:None/ None/ None PID:0.5 D/O/S:None/ None/ None	CL		LEAN CLAY (CL): stiff; with glass debris, no discoloration, odor, or sheen.		
				SM		SILTY SAND (SM): black; dense; red staining; blocky.		
						End of boring 10.0 feet		
12.5								802.5
15.0								800.0
17.5								797.5
20.0								795.0

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-05E-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-05N-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 813.5 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980117.021m, E:476313.238m Completion Depth: 10.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSCUC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		
1.5		1	PID:0.2 D/O/S:None/ None/ None			FILL: silty sand matrix; brown; loose. At 1.5': Concrete.	Fill	812.5
2.7			PID:4.7 D/O/S:Black/ Moderate/ None	SM		At 2.7': Concrete.		810.0
5.0			PID:0.9 D/O/S:Black/ Moderate/ None	SM		SILTY SAND (SM): very fine to fine grained; black and gray; dense; moderate petroleum odor, light sheen; thinly bedded.		807.5
7.5		2	PID:1.9 D/O/S:None/ None/ None	ML		SANDY SILT (ML): brown; very soft; no discoloration, odor, or sheen; rapid dilatancy.	Native	805.0
10.0						End of boring 10.0 feet		802.5
12.5								800.0
15.0								797.5
17.5								795.0
20.0								

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-05N-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-05S-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 814.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980102.968m, E:476312.781m Completion Depth: 10.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSCUC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		
1.5		1	PID:0.4 D/O/S:None/ None/ None	SM		SILTY SAND (SM): medium grained; brown; loose; trace coarse grained gravel.	Fill	812.5
3.0			PID:0.5 D/O/S:None/ None/ None			SILTY SAND (SM): medium to coarse grained; gray; wet; loose; coarsens with depth.		810.0
4.5			PID:0.4 D/O/S:None/ None/ None	SM				807.5
7.5		2	PID:13.4 D/O/S:None/ Strong/ Light	SM		SILTY SAND (SM): intermixed with peat; black; soft; strong petroleum odor, light sheen.	Native	805.0
9.0				PT		PEAT (PT): black; soft; strong petroleum odor, light sheen.		802.5
10.0						End of boring 10.0 feet		800.0
12.5								797.5
15.0								795.0
17.5								
20.0								

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-05S-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-05W-20

SHEET 1 OF 1

Project:	Bryn Mawr Park Investigation	Surface Elevation:	813.5 ft
Project No.:	23271806	Drilling Method:	Direct Push
Location:	Minneapolis, MN	Sampling Method:	Discrete Macro Core
Coordinates:	UTM 15 N:4980111.688m, E:476306.292m	Completion Depth:	10.0 ft
Datum:	NAD 83		

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SCUC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		812.5
2.5		1	PID:0.6 D/O/S:None/ None/ None			FILL: silty sand with trace glass debris throughout; brown; loose.	Fill	810.0
5.0			PID:0.9 D/O/S:None/ None/ None					807.5
7.5		2	PID:1.2 D/O/S:Black/ Moderate/ None			From 6.5': gray, moderate petroleum odor, no sheen.		805.0
10.0			PID:0.8 D/O/S:Black/ Light/ None	SM		At 8': coarse grained sand, strongest petroleum odors. SILTY SAND (SM): black; dense; trace masonry/brick debris; light petroleum odor.		802.5
12.5						End of boring 10.0 feet		800.0
15.0								797.5
17.5								795.0
20.0								

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-05W-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-06-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation	Surface Elevation: 810.5 ft
Project No.: 23271806	Drilling Method: Direct Push
Location: Minneapolis, MN	Sampling Method: Discrete Macro Core
Coordinates: UTM 15 N:4980134.224m, E:476244.715m	Completion Depth: 15.0 ft
Datum: NAD 83	

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	S C S U	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		810.0
			PID:0.1 D/O/S:None/ None/ None	CL		SANDY LEAN CLAY (CL): brown; medium stiff; trace fine grained gravel; medium plasticity; slow dilatancy.		
2.5		1	PID:0.6 D/O/S:None/ None/ None			SILTY SAND (SM): medium to coarse grained; black to brown; dense; trace coarse grained gravel.		807.5
5.0			PID:0.4 D/O/S:None/ None/ None	SM		From 7': transitions to gray, coarsens downward.	Fill	805.0
7.5		2	PID:0.3 D/O/S:None/ None/ None			From 10': mostly coarse grained silty sand.		802.5
10.0			PID:0.0 D/O/S:None/ None/ None					800.0
12.5		3	PID:0.5 D/O/S:None/ None/ None	PT		PEAT (PT): soft; 1" thick interbed of gray lean clay with small white shells.	Native	797.5
15.0						End of boring 15.0 feet		795.0
17.5								792.5
20.0								

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Temporary well screen set 4-14' bgs
 Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-06-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-07-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 811.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980114.772m, E:476214.361m Completion Depth: 15.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0					TOPSOIL.		
0.0 - 2.5		1	PID:4.6 D/O/S:None/ None/ None		FILL: silty sand intermixed with lean clay; moist; dense to stiff; trace coarse gravel. At 2.3': 2" gravel clast.	Fill	810.0
2.5 - 5.0			PID:2.7 D/O/S:None/ Light/ None		SILTY SAND (SM): black; wet; stiff; moderate petroleum odor, light sheen; homogeneous.		807.5
5.0 - 7.5		2	PID:7.0 D/O/S:Black/ Moderate/ Light	SM	At 7.5': Blue ceramic tile.		805.0
7.5 - 10.0			PID:3.4 D/O/S:None/ Light/ Light		SANDY LEAN CLAY (CL): light odor and sheen.		802.5
10.0 - 12.5			PID:2.1 D/O/S:None/ Moderate/ None		SILTY SAND (SM): dark gray; saturated; loose; moderate petroleum odor.		800.0
12.5 - 15.0		3	PID:1.0 D/O/S:None/ None/ None		POORLY GRADED SAND WITH SILT (SP-SM): medium grained; brown; loose; homogeneous.	Native	797.5
15.0					End of boring 15.0 feet		795.0
17.5							792.5
20.0							

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-07-20.
 PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENV\IRO LOG_BARR TEMPLATE.GDT



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-07E-20

SHEET 1 OF 1

Project:	Bryn Mawr Park Investigation	Surface Elevation:	811.0 ft
Project No.:	23271806	Drilling Method:	Direct Push
Location:	Minneapolis, MN	Sampling Method:	Discrete Macro Core
Coordinates:	UTM 15 N:4980113.549m, E:476225.127m	Completion Depth:	15.0 ft
Datum:	NAD 83		

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SCUC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		
						CLASS V.		
			PID:0.4 D/O/S:None/ None/ None			SILTY SAND (SM): gray; dry to wet; dense; trace coarse gravel; heterogeneous.		810.0
2.5		1	PID:1.1 D/O/S:None/ None/ None					807.5
5.0						From 5': strong odor and black discoloration.		805.0
7.5		2	PID:21.3 D/O/S:Black/ Strong/ None				Fill	802.5
10.0			PID:5.2 D/O/S:Black/ Strong/ None					800.0
12.5		3	PID:3.4 D/O/S:Black/ Strong/ None					
15.0			PID:0.6 D/O/S:None/ None/ None			SILTY SAND (SM): gray; some clay lenses.	Native	797.5
						CLAYEY SAND (SC): gray; loose to soft.		
						End of boring 15.0 feet		795.0
								792.5

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-07E-20.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.



Barr Engineering Company
 4300 MarketPointe Drive Suite 200
 Minneapolis, MN 55435
 Telephone: 952-832-2600

LOG OF BORING GP-08-20

SHEET 1 OF 1

Project: Bryn Mawr Park Investigation Surface Elevation: 811.0 ft
 Project No.: 23271806 Drilling Method: Direct Push
 Location: Minneapolis, MN Sampling Method: Discrete Macro Core
 Coordinates: UTM 15 N:4980141.755m, E:476192.804m Completion Depth: 15.0 ft
 Datum: NAD 83

Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	SSSC	Graphic Log	LITHOLOGIC DESCRIPTION	MAJOR UNIT	Elevation, feet
0.0						TOPSOIL.		810.0
0.0 - 2.5		1	PID:0.1 D/O/S:None/ None/ None			SILTY SAND (SM): fine grained; brown to dark brown; loose; trace gravel.	Fill	807.5
2.5 - 5.0			PID:0.1 D/O/S:None/ None/ None	SM		SILTY SAND (SM): medium grained; brown; loose; homogeneous.		805.0
5.0 - 7.5		2	PID:0.1 D/O/S:None/ None/ None			PEAT (PT): black; soft; abundant small white shells.		802.5
7.5 - 10.0			PID:0.1 D/O/S:None/ None/ None			LEAN CLAY (CL): gray white; very soft.		800.0
10.0 - 15.0		3		CL		10 - 15': No recovery, clay too soft to be captured by liner.	Native	797.5
15.0						End of boring 15.0 feet		795.0
17.5								792.5
20.0								

Date Boring Started: 7/15/20
 Date Boring Completed: 7/15/20
 Logged By: AKS3
 Drilling Contractor: Stevens Drilling and Environmental
 Drill Rig: Track Mounted Geoprobe 7822DT

Remarks: Temporary well screen set 4-14' bgs
 Background PID: 0.0 ppm
 Field log and sample(s) from this boring were originally labeled SB-08-20.
 PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/SF = Gravel/Sand/Fines
 Additional data may have been collected in the field which is not included on this log.

M:\GINT\PROJECTS\23271806_BRYN MAWR PARK INVESTIGATION.GPJ_BARR\LIBRARY.GLB_ENVIRO LOG_BARR TEMPLATE.GDT

TEST TRENCH FIELD SAMPLING AND SCREENING LOG

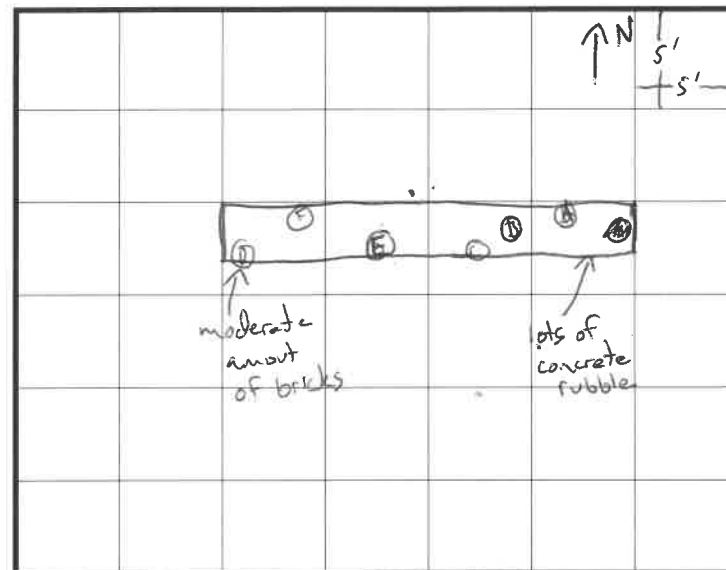
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-01-20

Date: 7/16/20
 Time Started: 8:45
 Time Ended: 9:45

Sampler: ARP2
 Calibration Time: 8:00
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1.5	N/N	0.7	Brown SM w/ gravel
B	4	N/N	1.0	Black OL
C	6.5	N/N	0.6	Gray/white CL
D	2	N/N	0.5	Brown SM w/ gravel, debris
E	5.5	N/N	0.4	Black OL
F	7	N/N	0.3	Gray/white CL

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..



General stratigraphy description / General notes

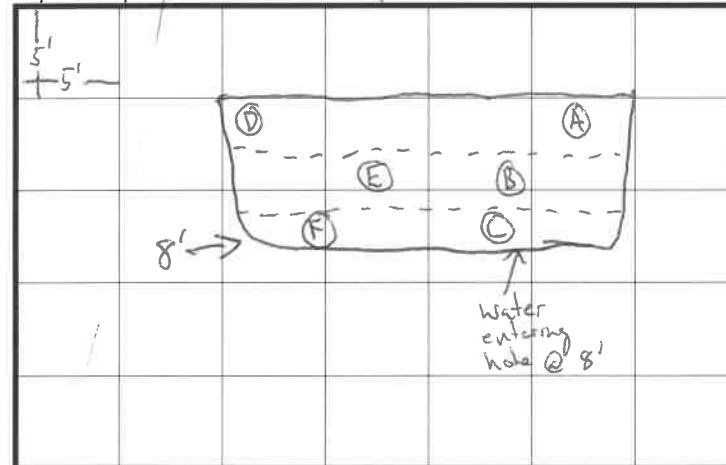
0-3.5': Brown Silty Sand Fill, with gravel + debris
 large concrete rubble, brick, metal wire, glass (trace)
 (see plan view) (trace)

3.5-6': Black OL, possibly buried topsoil, some organic material

6-8': Gray/white Lean Clay, very soft, wet

Comp sample TE-01-20 (0-3.5) @ 10:00

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

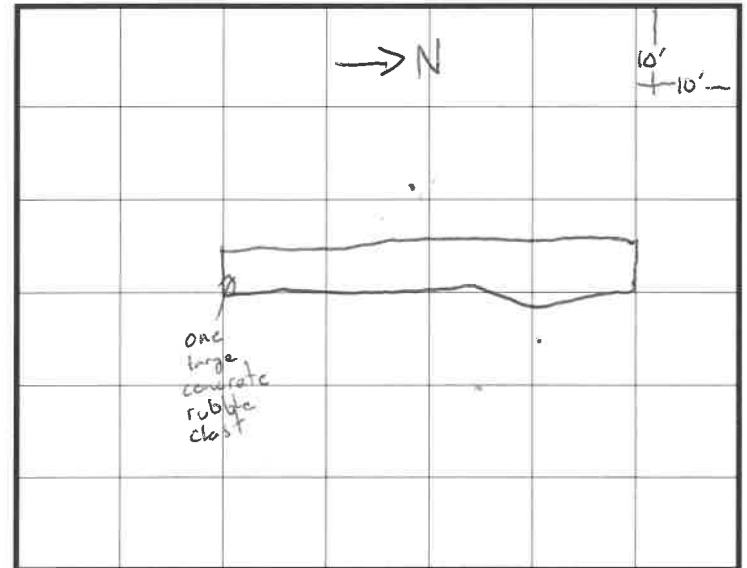
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-02-20

Date: 7/16/20
 Time Started: 10:45
 Time Ended: 11:10

Sampler: AKP2
 Calibration Time: 8:30
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	2.5	N/N	0.3	Grey CH
B	0.5	N/N	0.1	Black topsoil
C	0.5	N/N	0.4	" "

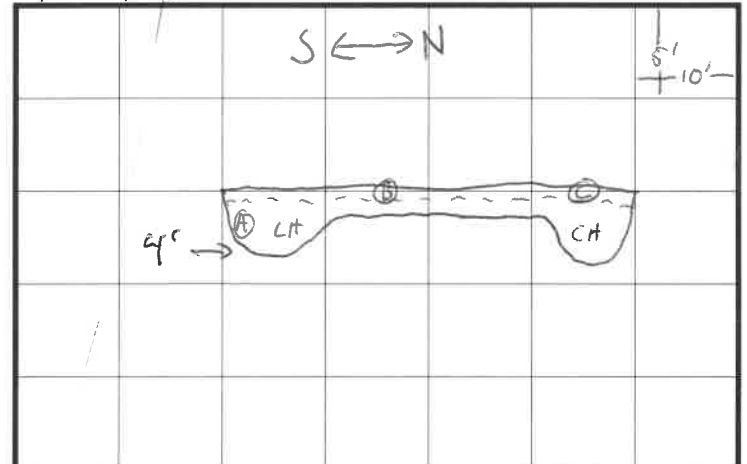
PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..



General stratigraphy description / General notes

0-0.5: Black topsoil, trace debris (one metal wire chunk of concrete)
 0.5-4: Gray fat Clay, high plast.

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

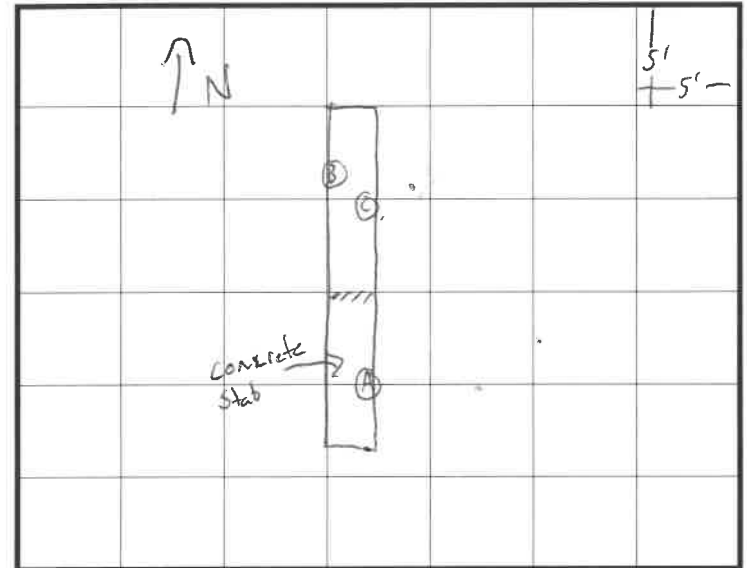
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-03-20

Date: 7/16/20
 Time Started: 11:50
 Time Ended: 12:15

Sampler: AKR2
 Calibration Time: 8:30
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1	N/N	0.2	Brown SM Fill
B	0.5	N/N	0.2	" " "
C	3.5	N/N	0.1	Gray Clt

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities.

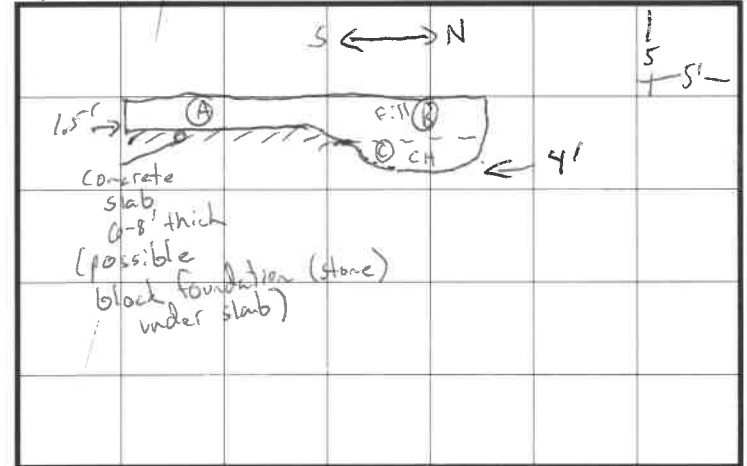


General stratigraphy description / General notes

0-1.5': Topsoil to brown salty sand fill
 1.5-4': Gray Fat Clay, high plasticity

Comp sample TE-03-20 (0-1.5) @ 12:30

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

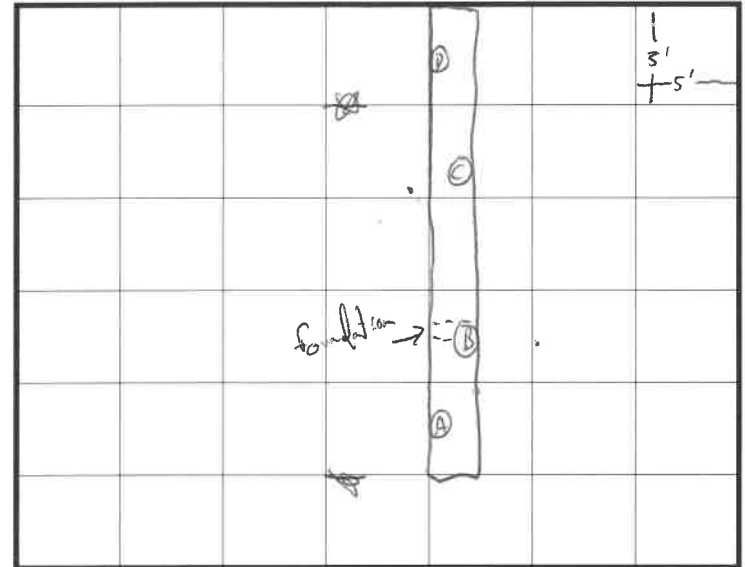
Client: _____
 Project Name: Bryn Mawr
 Number: TE-04-20
 Location ID: 23271806

Date: 7/16/20
 Time Started: 12:50
 Time Ended: 13:15

Sampler: AK12
 Calibration Time: 8:30
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1	N/N	0.3	Brown SM w/ gravel
B	3.5'	N/N	0.2	"
C	2.5'	N/N	0.1	"
C	3'	N/N	0.2	"

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..

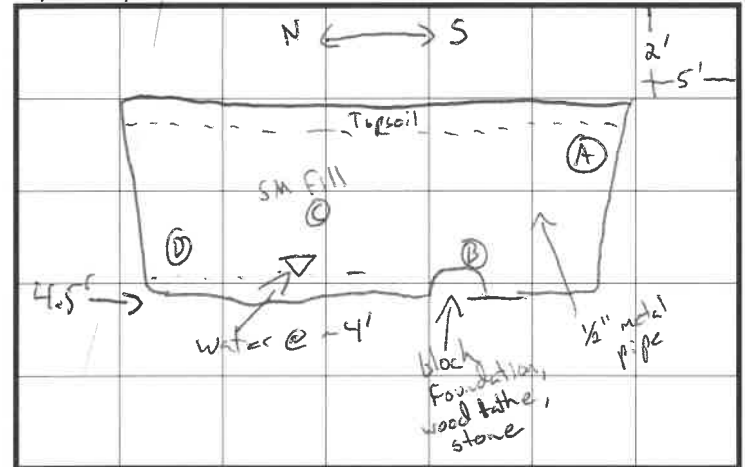


General stratigraphy description / General notes

0-0.5' Black topsoil
 0.5-4.5': Brown Silty sand fill w/ gravel + trace debris (metal, concrete)

Comp sample TE-04-20(0-4) @ 13:30

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

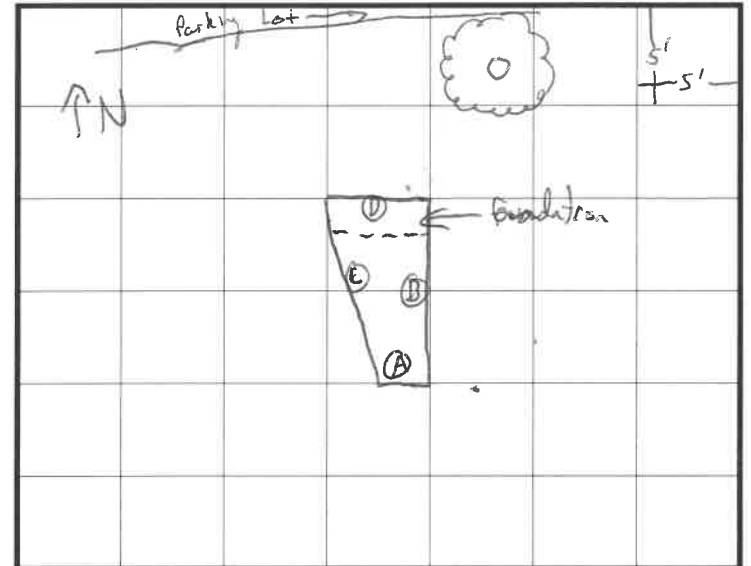
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-05-20

Date: 7/16/20
 Time Started: 14:10
 Time Ended: 14:40

Sampler: ARP2
 Calibration Time: 8:30
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1	N/N	0.2	Brown SM
B	3.5	N/N	0.0	DK gray CL
C	2	N/N	0.1	Brown SM
D	0.5	N/N	0.0	" "

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities.

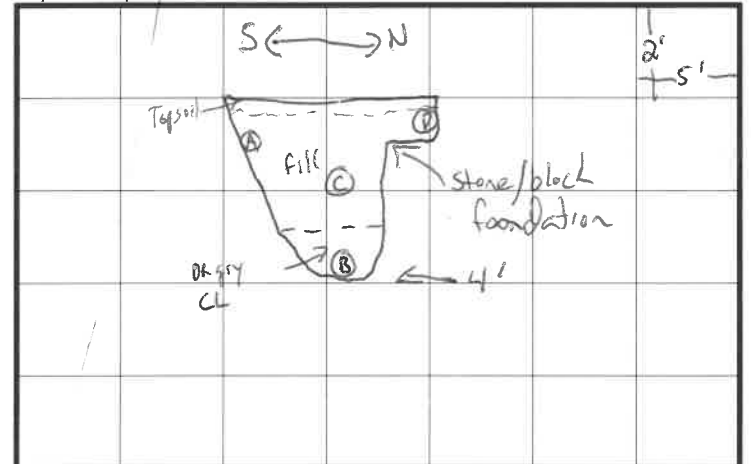


General stratigraphy description / General notes

0-0.5 : Topsoil
 0.5-3 : Brown Silty Sand fill w/ gravel
 3-4 : DK gray lean clay w/ sand + gravel, low plast.

Comp sample TE-05-20 (0-3) @ 14:50

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

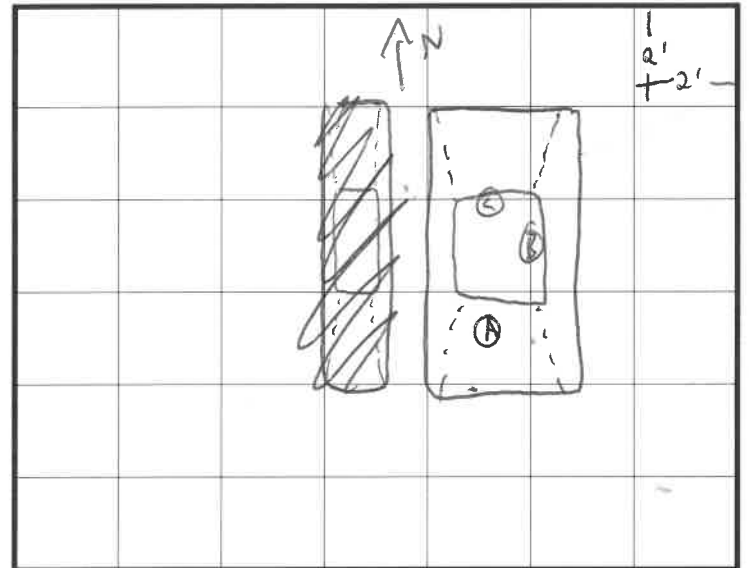
Client: _____
 Project Name: Dryn Murr
 Number: 23271406
 Location ID: TE-06-20

Date: 7/14/20
 Time Started: 15:20
 Time Ended: 15:40

Sampler: APPA
 Calibration Time: 8:30
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1'	N/N	0.2	Brown SM w/ gravel
B	4.5'	Y/4tr	37.5	Gr. SM w/ waste moderate degraded odor, trace sheen
C	8'	Y/4tr	24.3	" " "
				see back for GEM reading

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..

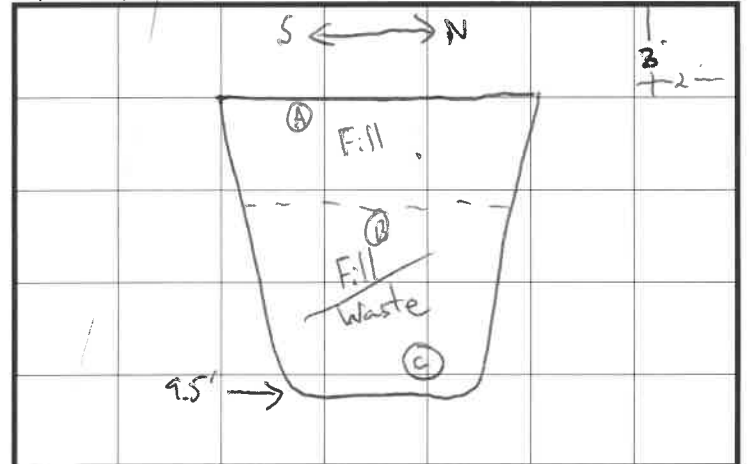


General stratigraphy description / General notes

0-3.5: Brown Silty Sand w/ gravel + debris (concrete, bricks)
 3.5-9.5 - DK Grey Silty Sand Matrix / Waste* (~30%)
 * glass, paper, tile, metal, foam, plastic?, susp. ASM?

 comp sample → TE-06-20 (4-9) @ 16:00
 VOC/GAO → TE-06-20 (6')

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

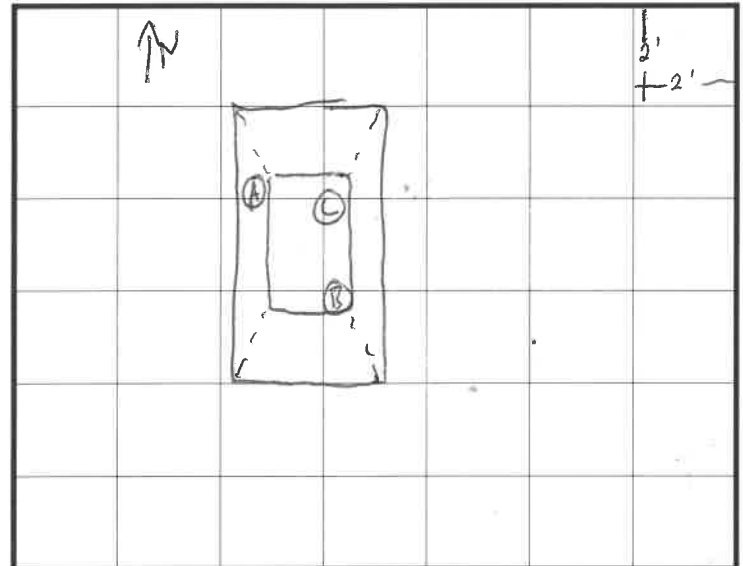
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-07-20

Date: 7/16/20
 Time Stated: 16:05
 Time Ended: 16:30

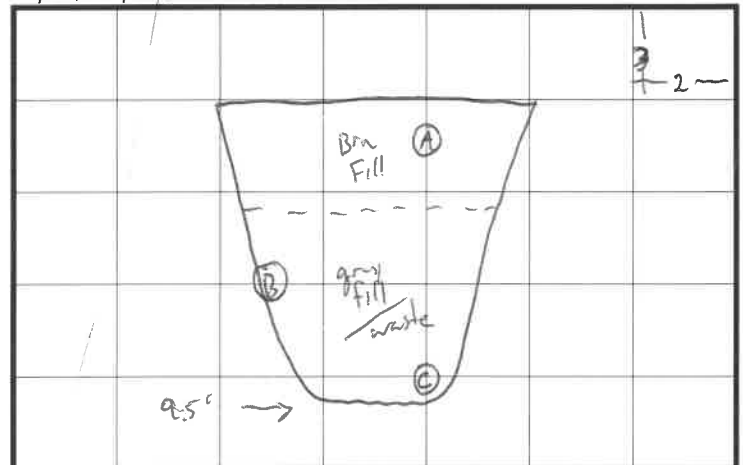
Sampler: AKP2
 Calibration Time: 8:30
 Background Headspace: 0.1 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1.5	N/N	0.0	Brown SM
B	6	Y/	11.5	Dk gray SM w/ debris/waste
C	9	Y/	16.8	" " " " "
				See back for GEM reading

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..



CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



General stratigraphy description / General notes

0-3.5: Brown Silty Sand Fill w/ gravel, little debris (<10%)
 concrete brick

3.5-9.5: Dk gray silty sand matrix w/ waste* (~20%)
 *glass, metal, wood, cardboard, wire, plastic,
 suspect ACM?

Comp sample TE-07-20 (4-9) @ 17:00
 Voc/GRO TE-07-20 (8')

TEST TRENCH FIELD SAMPLING AND SCREENING LOG

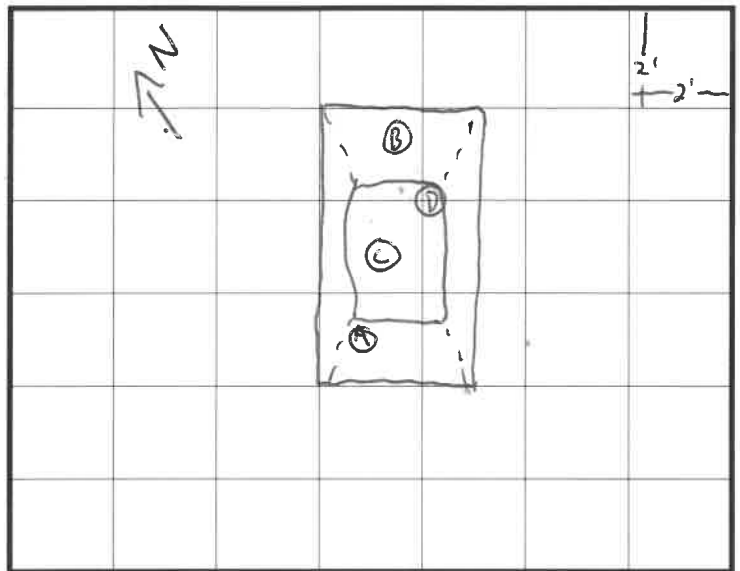
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-08-20

Date: 7/17/20
 Time Started: 7:20
 Time Ended: 7:45

Sampler: AKP2
 Calibration Time: 7:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	2	N/N	0.2	Brown SM fill
B	3	N/N	0.1	Mixed fill
C	6'	N/N	0.1	dk gray SM w/ debris
D	9'	N/N	0.2	dk gray SM
				see back for GEM reading

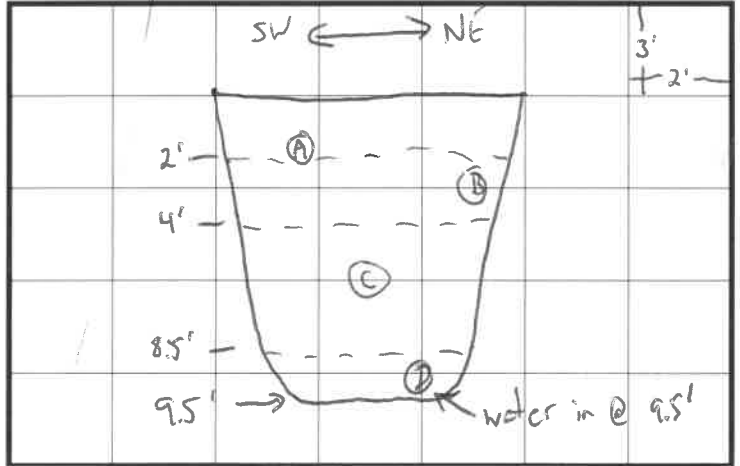
PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities.



General stratigraphy description / General notes

0-2: Brown Silty Sand fill w/ gravel + large concrete rubble
 2-4: General Fill, mix of gray clay, black clay, gray sand trace debris, (<5%)
 4-8.5: Dark grey Silty Sand fill w/ waste/debris (~10%) glass, metal, wood, brick, no noticeable odor
 8.5-9.5: dk gray Silty Sand, coarser grained, no debris
 comp sample TE-08-20 (4-8) @ 8:00
~~4-6/20 TE 07 20 154~~

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

Client: _____

Project Name: Bryn Mawr

Number: 23271806

Location ID: TE-09-20

Date: 7/17/20

Time Started: 8:20

Time Ended: 8:40

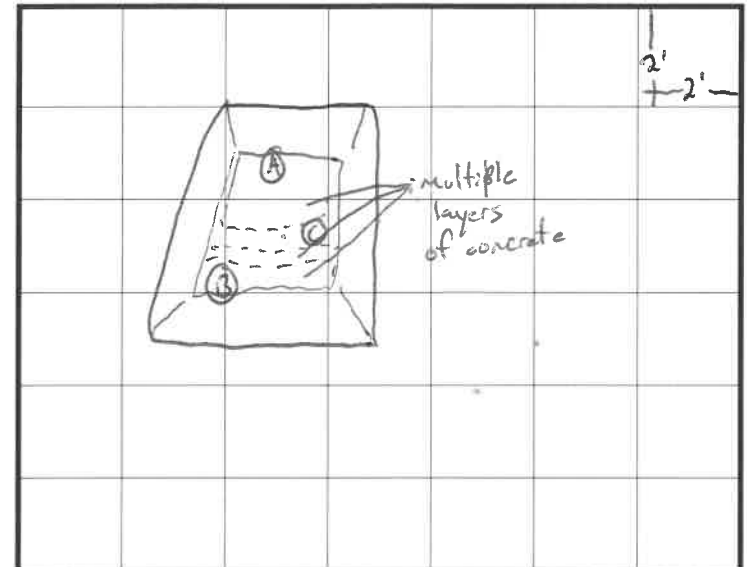
Sampler: AKP2

Calibration Time: 9:10

Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1	N/N	0.1	Mixed fill
B	2.5	N/N	0.5	" "
C	4.5	N/N	0.2	" "

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities.



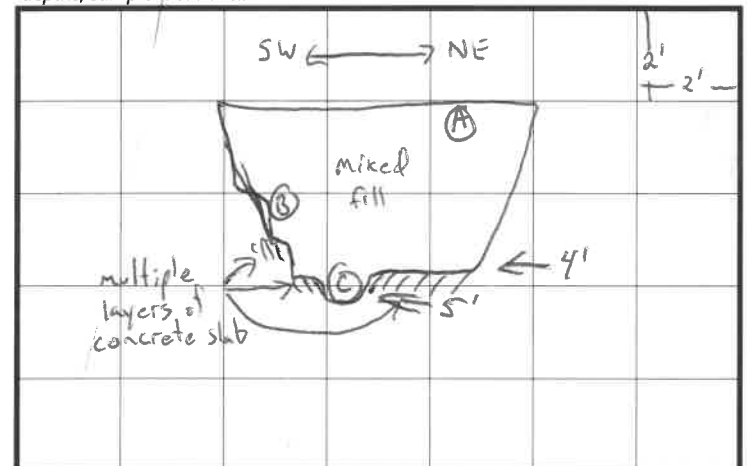
General stratigraphy description / General notes

0-5: General fill, mix of gray/brown CL + brown SM w/ some (20%) debris (concrete, wood, brick)

@ 4' encountered concrete slab, broke through to another layer of concrete; concrete is piled up around the ground surface as well

comp sample TE-09-20 (0-5) @ 8:55

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

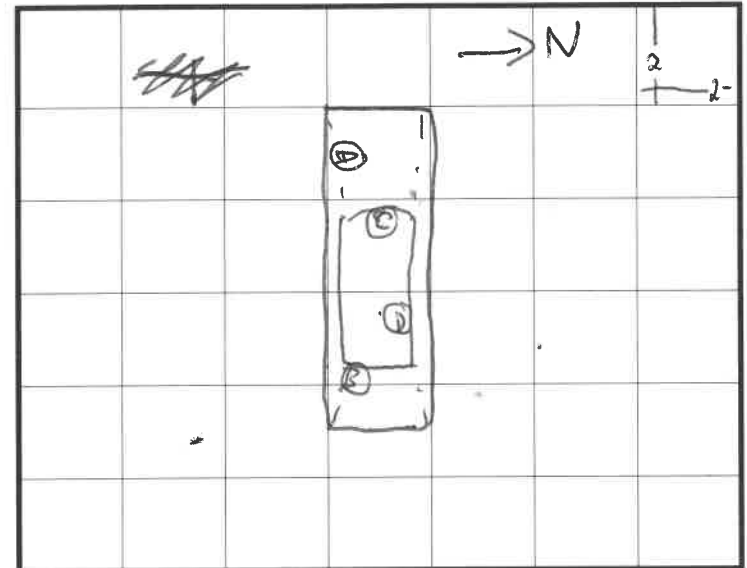
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-10-20

Date: 7/17/20
 Time Started: 9:15
 Time Ended: 9:35

Sampler: AKP2
 Calibration Time: 7:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1.5	N/N	0.1	Brown SM fill
B	2	N/N	0.0	" " "
C	4.5	N/N	0.0	Mixed Fill
D	6.5	N/N	0.3	Grey SM

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..



General stratigraphy description / General notes

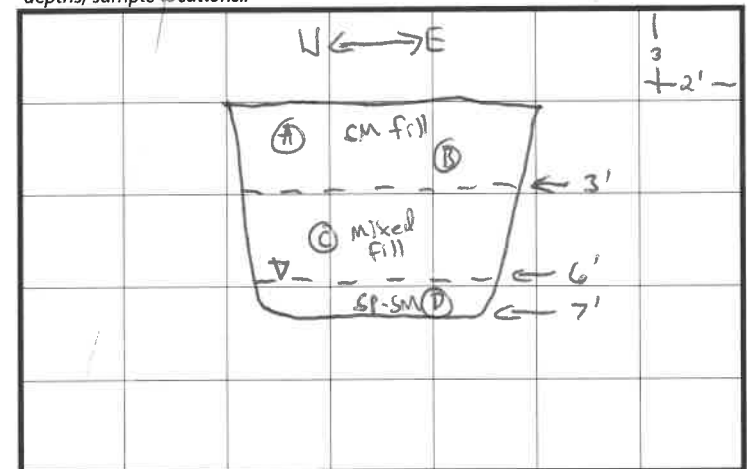
0-3: Brown Silty Sand fill w/ debris (~20%); glass, metal, wood, plastic, paper, ~~MSW~~

3-6 - General Fill, mixed gray clay + brown SM, w/ little debris (<10%); wire, glass

6-7 - Brownish gray silty sand, m-cg, wet, water in hole @ 6' bgs

comp sample TE-10-20 (0-2) @ 9:50
~~no flow " " (2')~~

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

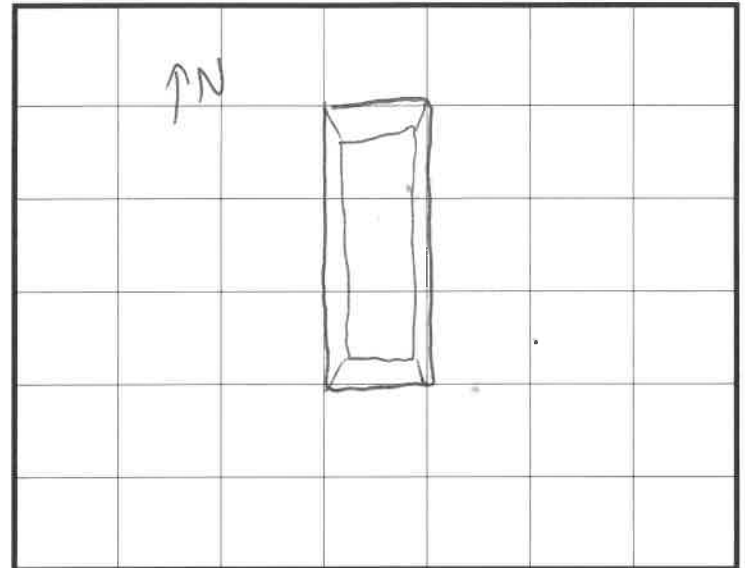
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: ~~TE-11A-20~~ TE-11A-20

Date: 7/17/20
 Time Started: 10:10
 Time Ended: _____

Sampler: AKP2
 Calibration Time: 2:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1	N/N	0.1	Brown SM fill

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..

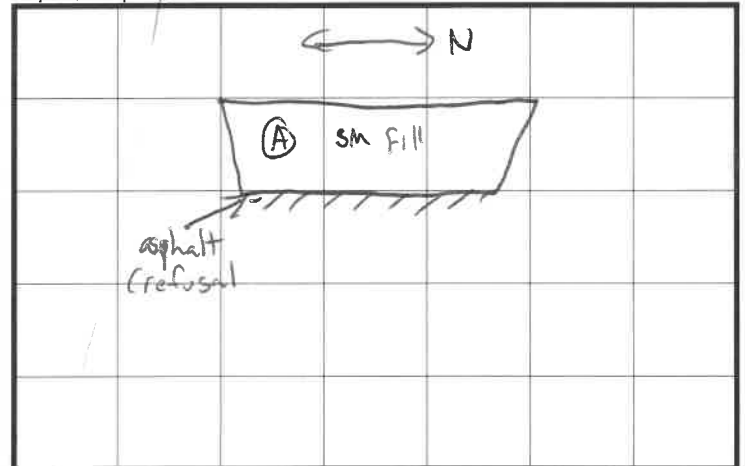


General stratigraphy description / General notes

0-2 : Brown Silty Sand fill w/ gravel , no debris
 @ 2' asphalt , refusal , offset 20' W to
 TE-11B-20

Same conditions @ TE-11B-20
 No sample collected

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

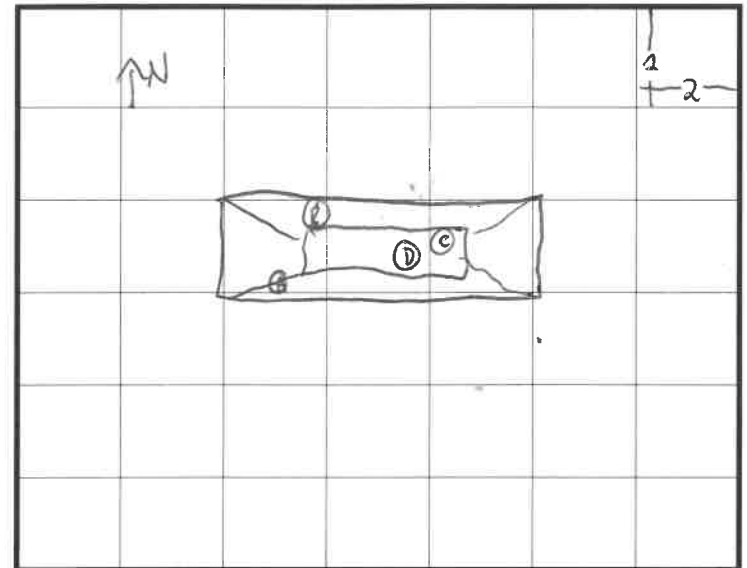
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-12-20

Date: 7/17/20
 Time Started: 10:50
 Time Ended: 11:30

Sampler: AR2
 Calibration Time: 9:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	1	N/N	0.0	Brown SM
B	3.5	N/N	0.1	Black CLS
C	5.5	N/N	0.5	Dk gray SC
D	9'	N/N	0.4	Dk Gray SC

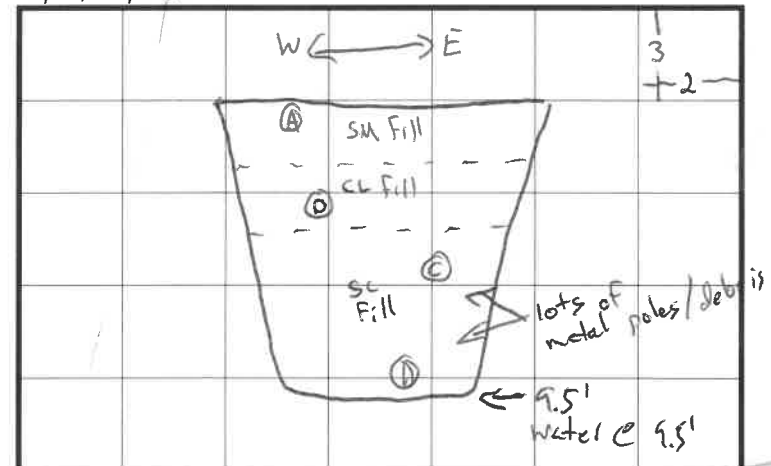
PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities.



General stratigraphy description / General notes

0-2: Brown Silty Sand w/ gravel
 2-4: Black, Sandy Lean Clay fill w/ trace debris (<10%)
 metal wire + wood
 4-9.5: Dk Gray Clayey Sand fill w/ debris (~15%)
 brick, concrete, wood, large metal poles/rail
 comp sample TE-12-20 (4-9) @ 11:50

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

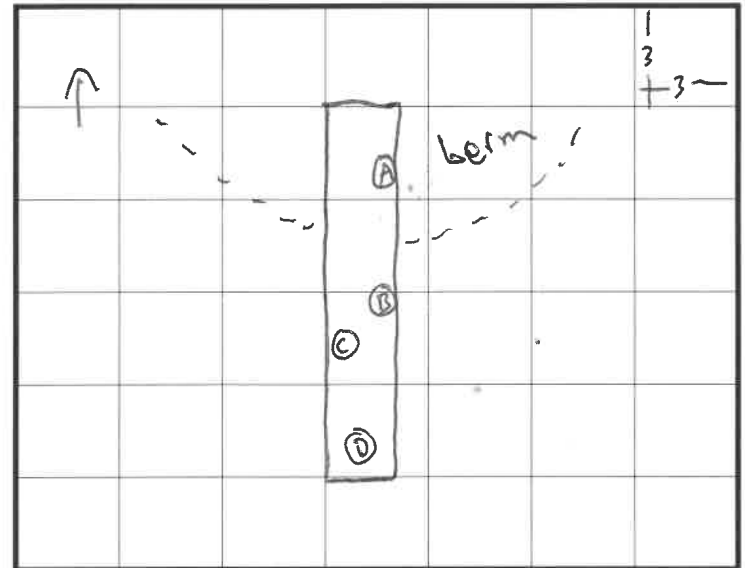
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-13-20

Date: 7/17/20
 Time Started: 12:00
 Time Ended: 12:30

Sampler: ARPA
 Calibration Time: 7:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	+5	N/N	0.0	Brown SM
B	1.5	N/N	1.4	Brown SM
C	3.5	Y/N	10.6	Mixed fill, mod. odor (old petrs?)
D	6.5	Y/N	3.4	Gray SM, light odor

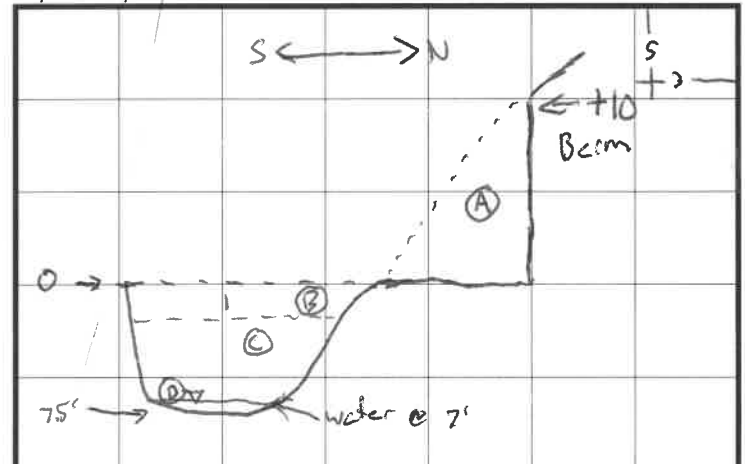
PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..



General stratigraphy description / General notes

Berm: Brown silty sand, fine, topsoil cover
 0-3: Brown silty sand w/ gravel fill
 3-6: Mixed fill; silty sand + lean clay, black, w/ debris (210%)
 metal wire/pipe, wood, plaster?
 6-7.5: ~~SM~~ gray silty sand fill w/ gravel + trace debris (wood)
 Comp sample TE-13-20 (3-7) @ 12:40
 VOC/GRO " " " (3.5)

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations..



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

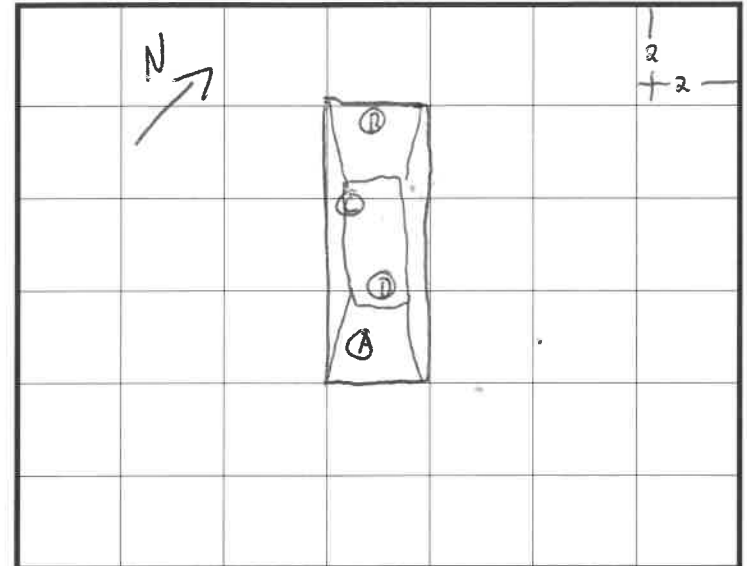
Client: _____
 Project Name: Brya Manor
 Number: 23271806
 Location ID: TE-14-20

Date: 7/17/20
 Time Started: 12:55
 Time Ended: 13:10

Sampler: AMP2
 Calibration Time: 7:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	2	N/N	0.0	Brown SM
B	4.5	N/N	0.2	Lt brown SP-SM
C	6	N/N	0.1	Mixed fill
D	7	N/N	0.0	Brownish Gray SC

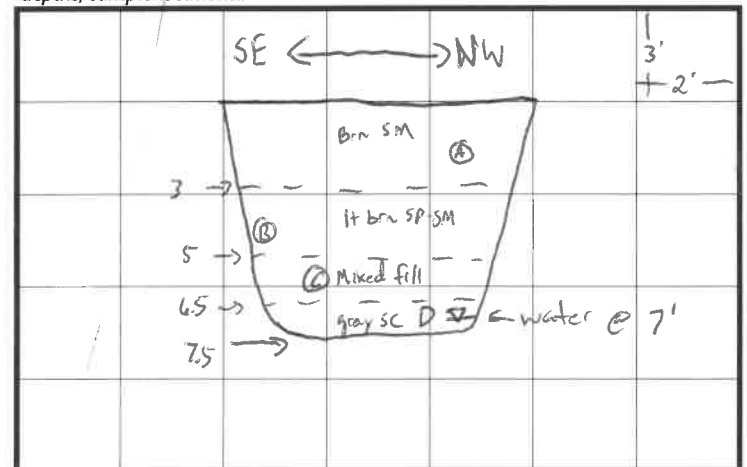
PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities.



General stratigraphy description / General notes

0-3: Brown Silty Sand fill w/ debris (-10%) glass, wood, metal
 3-5: Lt. brown Sand w/ silt w/ trace debris; glass, wood
 5-6.5: Brown Mixed Fill, Lean clay + SM, trace debris
 6.5-7.5: Brownish gray clayey sand w/ large concrete rubble
 water @ 7.0, sidewall cave-in
 Comp sample TE-14-20 (1-7) @ 13:20

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



TEST TRENCH FIELD SAMPLING AND SCREENING LOG

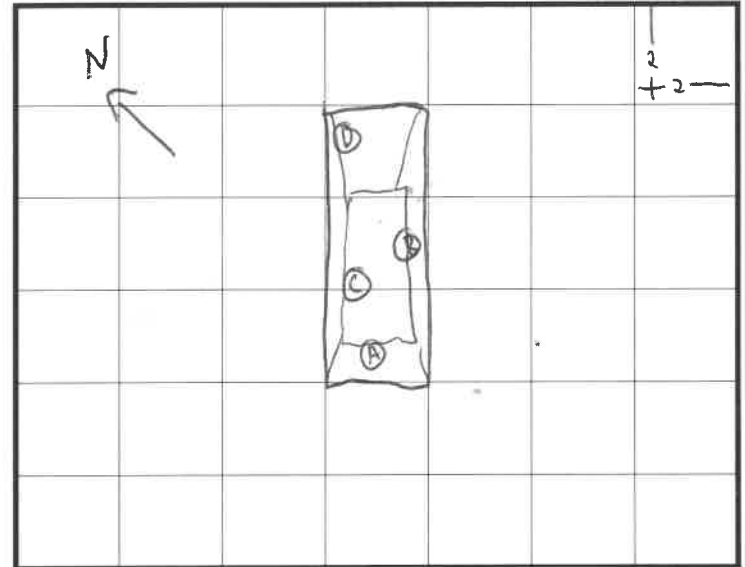
Client: _____
 Project Name: Bryn Mawr
 Number: 23271806
 Location ID: TE-15-20

Date: 7/17/20
 Time Stated: 13:35
 Time Ended: _____

Sampler: ARP2
 Calibration Time: 7:10
 Background Headspace: 0.0 ppm

Sample ID	Depth (ft)	Odor/Sheen	Headspace Reading (ppm)	Description
A	0.5	N/N	0.0	Mixed Fill
B	2.5	N/N	0.2	" " w/ debris/MSW
C	4.5	N/N	0.1	" "
D	6	N/N	0.3	Grey SC

PLAN VIEW SKETCH: identify scale and direction, excavation extents and depths, sample locations, structures, utilities..

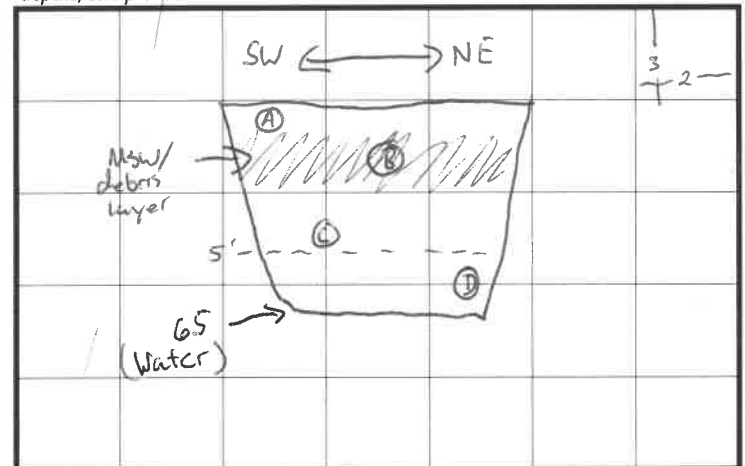


General stratigraphy description / General notes

0-5: Mixed fill, mostly brown silty sand, some CL
 - from 1-3', layer of MSW/debris (~50%) including oil filter, metal plating + pipe, glass, styrofoam, paper
 - trace debris above + below
 5-6.5 - Dk Gray clayey sand w/ large concrete rubble

Sample comp TE-15-20 (0-5) @ 14:20

CROSS SECTION SKETCH: identify scale and direction, excavation extents and depths, sample locations.



Attachment C

Photographic Log

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 1: TE-01-20, facing east



Photo 2: TE-01-20, debris observed

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN

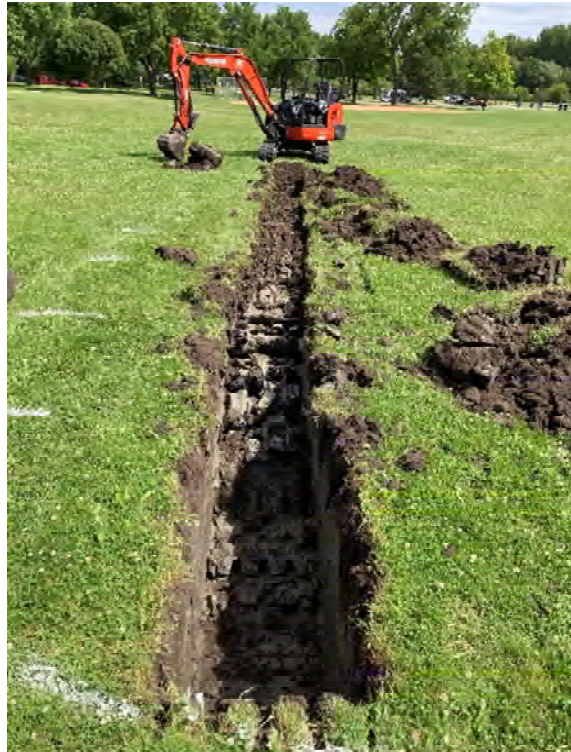


Photo 3: TE-02-20, facing north



Photo 4: TE-02-20, fat clay

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 5a: TE-03-20, facing north

Photo 5b: TE-03-20, facing south



Photo 6: TE-03-20, backfilled and seeded

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 7: TE-04-20, facing north



Photo 8: TE-05-20, north end, exposed footing

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 9a: TE-06-20, facing south

Photo 9b: TE-06-20, waste material



Photo 10: TE-06-20, fill with waste/debris

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 11: TE-07-20



Photo 12: TE-08-20

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 13: TE-09-20, facing south



Photo 14: TE-09-20, backfilled; concrete debris observed on ground surface

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 15a: TE-10-20, facing east

Photo 15b: TE-10-20, observed debris



Photo 16a: TE-11A-20, facing south

Photo 16b: TE-11A-20, observed asphalt

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 17: TE-12-20, facing south



Photo 18a & 18b: TE-12-20, observed debris

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 19a: TE-13-20, facing north

Photo 19b: TE-13-20, facing south



Photo 20: TE-13-20, observed debris

Attachment C
PHOTOGRAPH LOG
Test Excavations
Bryn Mawr Park
Minneapolis, MN



Photo 21: TE-14-20, facing north



Photo 22: TE-15-20, facing south

Attachment D

Laboratory Analytical Data



July 16, 2020

Service Request No:K2005398

Andrea Nord
Barr Engineering
4300 Market Pointe Drive, Suite 200
Minneapolis, MN 55435

Laboratory Results for: Bryn Mawr

Dear Andrea,

Enclosed are the results of the sample(s) submitted to our laboratory June 29, 2020
For your reference, these analyses have been assigned our service request number **K2005398**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Barr Engineering Company
Project: Bryn Mawr/23271806

Service Request:K2005398

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2005398-001	DU-1	6/24/2020	
K2005398-002	DU-2	6/24/2020	
K2005398-003	DU1 - L1 0.5-1.5'	6/24/2020	1200

BARR Barr Engineering Co. Chain of Custody

K2005398

Sample Origination State
 CO MI MN MO ND TX UT WI Other: _____

COC Number: **No 585314**
 COC 1 of 1

REPORT TO		INVOICE TO	
Company: Barr Eng.		Company: Barr Eng.	
Address:		Address:	
Address:		Address:	
Name:		Name:	
email: anord@barr.com		email:	
Copy to: BarrDM@barr.com		P.O.:	
Project Name: Boyn Mawr		Barr Project No: 23271806	

Perform MS/MSD Y / N	Total Number Of Containers	Analysis Requested		% Solids
		Water	Soil	
			Metals, PCRA PARTS DRO w/ SEC	

Matrix Code:
 GW = Groundwater
 SW = Surface Water
 WW = Waste Water
 DW = Drinking Water
 S = Soil/Solid
 SD = Sediment
 O = Other

Preservative Code:
 A = None
 B = HCl
 C = HNO₃
 D = H₂SO₄
 E = NaOH
 F = MeOH
 G = NaHSO₄
 H = Na₂S₂O₃
 I = Ascorbic Acid
 J = Zn Acetate
 K = Other

Location	Sample Depth			Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform MS/MSD Y / N	Total Number Of Containers	Analysis Requested		% Solids	Preservative Code	Field Filtered Y/N
	Start	Stop	Unit (m./ft. or in.)						Water	Soil			
1. DU-1	/	/	/	06/24/2020	-	S	N	2	X	X	X	X	* ISM
2. DU-2	/	/	/	↓	-	S	N	2	X	X	X	X	
3. DU1-L1	0.5	1.5	ft	↓	12:00	S	N	1	X	X	X	X	
4.													
5.													
6.													
7.													
8.													
9.													
10.													

BARR USE ONLY		Relinquished by: <i>[Signature]</i>	On Ice? <input checked="" type="checkbox"/> N	Date: 6/25/20	Time: 10:20	Received by: <i>[Signature]</i>	Date: 6/25/20	Time: 10:20
Sampled by: Alex Puetz		Relinquished by: <i>[Signature]</i>	On Ice? <input checked="" type="checkbox"/> N	Date: 6/25/20	Time: 16:00	Received by: <i>[Signature]</i>	Date: 6/20/20	Time: 19:30
Barr Proj. Manager: Jenn. Bratken		Samples Shipped VIA: <input type="checkbox"/> Ground Courier <input checked="" type="checkbox"/> Air Carrier			Air Bill Number:		Requested Due Date:	
Barr DQ Manager: Andrea Nord		<input type="checkbox"/> Sampler <input type="checkbox"/> Other: _____					<input checked="" type="checkbox"/> Standard Turn Around Time	
Lab Name: ALS		Lab WO:	Temperature on Receipt (°C):		Custody Seal Intact? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> None		<input type="checkbox"/> Rush (mm/dd/yyyy)	
Lab Location: Kelso, WA								

H:\RLG\STDFORMS\Chain of Custody Form 2015 RLG Rev. 01/30/2020



PC MLF

Cooler Receipt and Preservation Form

Client Barr Service Request K20 05398
 Received: 6/20/20 Opened: 6/24/20 By: [Signature] Unloaded: 6/20/20 By: [Signature]

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? one, front
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID	NA	Tracking Number	NA	Filed
2.9	-	-	-	-	1A01	585314		1724 6825 2160		

4. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
 5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 6. Were samples received in good condition (temperature, unbroken)? Indicate in the table below. NA Y N
 If applicable, tissue samples were received: Frozen Partially Thawed Thawed
 7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
 8. Did all sample labels and tags agree with custody papers? Indicate major discrepancies in the table on page 2. NA Y N
 9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? Indicate in the table below NA Y N
 11. Were VOA vials received without headspace? Indicate in the table below. NA Y N
 12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30

Sample Name: DU-1
Lab Code: K2005398-001

Units: ug/Kg
Basis: Dry

Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2-Methylnaphthalene	2.9 J	5.6	0.42	1	07/10/20 09:07	7/8/20	
Acenaphthene	4.7 J	5.6	0.34	1	07/10/20 09:07	7/8/20	
Acenaphthylene	7.3	5.6	0.32	1	07/10/20 09:07	7/8/20	
Anthracene	19	5.6	0.33	1	07/10/20 09:07	7/8/20	
Benz(a)anthracene	110	5.6	0.26	1	07/10/20 09:07	7/8/20	
Benzo(a)pyrene	130	5.6	0.43	1	07/10/20 09:07	7/8/20	
Benzo(b)fluoranthene	160	5.6	0.43	1	07/10/20 09:07	7/8/20	
Benzo(g,h,i)perylene	75	5.6	0.45	1	07/10/20 09:07	7/8/20	
Benzo(k)fluoranthene	60	5.6	0.27	1	07/10/20 09:07	7/8/20	
Chrysene	110	5.6	0.35	1	07/10/20 09:07	7/8/20	
Dibenz(a,h)anthracene	16	5.6	0.26	1	07/10/20 09:07	7/8/20	
Dibenzofuran	3.3 J	5.6	0.67	1	07/10/20 09:07	7/8/20	
Fluoranthene	210	5.6	0.70	1	07/10/20 09:07	7/8/20	
Fluorene	5.7	5.6	0.64	1	07/10/20 09:07	7/8/20	
Indeno(1,2,3-cd)pyrene	84	5.6	0.40	1	07/10/20 09:07	7/8/20	
Naphthalene	3.0 J	5.6	0.53	1	07/10/20 09:07	7/8/20	
Phenanthrene	80	5.6	0.66	1	07/10/20 09:07	7/8/20	
Pyrene	240	5.6	0.36	1	07/10/20 09:07	7/8/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluoranthene-d10	86	38 - 104	07/10/20 09:07	
Fluorene-d10	83	39 - 109	07/10/20 09:07	
Terphenyl-d14	101	38 - 113	07/10/20 09:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30

Sample Name: DU-2
Lab Code: K2005398-002

Units: ug/Kg
Basis: Dry

Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2-Methylnaphthalene	2.9 J	4.9	0.37	1	07/10/20 09:32	7/8/20	
Acenaphthene	3.9 J	4.9	0.30	1	07/10/20 09:32	7/8/20	
Acenaphthylene	8.2	4.9	0.28	1	07/10/20 09:32	7/8/20	
Anthracene	15	4.9	0.29	1	07/10/20 09:32	7/8/20	
Benz(a)anthracene	120	4.9	0.23	1	07/10/20 09:32	7/8/20	
Benzo(a)pyrene	150	4.9	0.38	1	07/10/20 09:32	7/8/20	
Benzo(b)fluoranthene	150	4.9	0.38	1	07/10/20 09:32	7/8/20	
Benzo(g,h,i)perylene	75	4.9	0.40	1	07/10/20 09:32	7/8/20	
Benzo(k)fluoranthene	64	4.9	0.24	1	07/10/20 09:32	7/8/20	
Chrysene	130	4.9	0.31	1	07/10/20 09:32	7/8/20	
Dibenz(a,h)anthracene	19	4.9	0.23	1	07/10/20 09:32	7/8/20	
Dibenzofuran	3.3 J	4.9	0.60	1	07/10/20 09:32	7/8/20	
Fluoranthene	180	4.9	0.63	1	07/10/20 09:32	7/8/20	
Fluorene	4.7 J	4.9	0.57	1	07/10/20 09:32	7/8/20	
Indeno(1,2,3-cd)pyrene	88	4.9	0.36	1	07/10/20 09:32	7/8/20	
Naphthalene	2.6 J	4.9	0.47	1	07/10/20 09:32	7/8/20	
Phenanthrene	61	4.9	0.59	1	07/10/20 09:32	7/8/20	
Pyrene	210	4.9	0.32	1	07/10/20 09:32	7/8/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluoranthene-d10	74	38 - 104	07/10/20 09:32	
Fluorene-d10	71	39 - 109	07/10/20 09:32	
Terphenyl-d14	84	38 - 113	07/10/20 09:32	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20 12:00
Date Received: 06/29/20 09:30

Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003

Units: ug/Kg
Basis: Dry

Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2-Methylnaphthalene	51	6.3	0.47	1	07/06/20 08:58	7/1/20	
Acenaphthene	26	6.3	0.38	1	07/06/20 08:58	7/1/20	
Acenaphthylene	41	6.3	0.36	1	07/06/20 08:58	7/1/20	
Anthracene	110	6.3	0.37	1	07/06/20 08:58	7/1/20	
Benz(a)anthracene	500	6.3	0.30	1	07/06/20 08:58	7/1/20	
Benzo(a)pyrene	530	6.3	0.49	1	07/06/20 08:58	7/1/20	
Benzo(b)fluoranthene	640	6.3	0.49	1	07/06/20 08:58	7/1/20	
Benzo(g,h,i)perylene	360	6.3	0.51	1	07/06/20 08:58	7/1/20	
Benzo(k)fluoranthene	250	6.3	0.31	1	07/06/20 08:58	7/1/20	
Chrysene	520	6.3	0.40	1	07/06/20 08:58	7/1/20	
Dibenz(a,h)anthracene	86	6.3	0.30	1	07/06/20 08:58	7/1/20	
Dibenzofuran	24	6.3	0.76	1	07/06/20 08:58	7/1/20	
Fluoranthene	840	6.3	0.80	1	07/06/20 08:58	7/1/20	
Fluorene	28	6.3	0.73	1	07/06/20 08:58	7/1/20	
Indeno(1,2,3-cd)pyrene	370	6.3	0.46	1	07/06/20 08:58	7/1/20	
Naphthalene	44	6.3	0.60	1	07/06/20 08:58	7/1/20	
Phenanthrene	470	6.3	0.75	1	07/06/20 08:58	7/1/20	
Pyrene	1000	6.3	0.41	1	07/06/20 08:58	7/1/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluoranthene-d10	58	38 - 104	07/06/20 08:58	
Fluorene-d10	53	39 - 109	07/06/20 08:58	
Terphenyl-d14	64	38 - 113	07/06/20 08:58	



Semivolatile Organic Compounds by GC

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30

Sample Name: DU-1
Lab Code: K2005398-001

Units: mg/Kg
Basis: Dry

Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
C10 - C28 DRO	12 H	9.9	2.6	1	07/09/20 13:29	7/8/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	113	51 - 126	07/09/20 13:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30

Sample Name: DU-2
Lab Code: K2005398-002

Units: mg/Kg
Basis: Dry

Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
C10 - C28 DRO	18 H	11	2.7	1	07/09/20 14:37	7/8/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	117	51 - 126	07/09/20 14:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20 12:00
Date Received: 06/29/20 09:30

Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003

Units: mg/Kg
Basis: Dry

Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
C10 - C28 DRO	150	13	3.4	1	07/08/20 00:11	7/1/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	102	51 - 126	07/08/20 00:11	



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU-1
Lab Code: K2005398-001

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30
Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	5.4 J	mg/Kg	6.7	1.7	2	07/10/20 16:21	07/09/20	
Barium	6010C	114	mg/Kg	0.67	0.25	2	07/10/20 16:21	07/09/20	
Cadmium	6010C	0.24	mg/Kg	0.17	0.08	2	07/10/20 16:21	07/09/20	
Chromium	6010C	14.2	mg/Kg	0.67	0.25	2	07/10/20 16:21	07/09/20	
Lead	6010C	24.6	mg/Kg	1.7	0.6	2	07/10/20 16:21	07/09/20	
Mercury	7471B	0.048	mg/Kg	0.022	0.002	1	07/14/20 11:02	07/14/20	
Selenium	6010C	ND U	mg/Kg	6.7	1.7	2	07/10/20 16:21	07/09/20	
Silver	6010C	ND U	mg/Kg	0.67	0.25	2	07/10/20 16:21	07/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU-2
Lab Code: K2005398-002

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30
Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	5.1 J	mg/Kg	6.1	1.5	2	07/10/20 16:46	07/09/20	
Barium	6010C	90.2	mg/Kg	0.61	0.23	2	07/10/20 16:46	07/09/20	
Cadmium	6010C	0.29	mg/Kg	0.15	0.07	2	07/10/20 16:46	07/09/20	
Chromium	6010C	11.5	mg/Kg	0.61	0.23	2	07/10/20 16:46	07/09/20	
Lead	6010C	27.0	mg/Kg	1.5	0.5	2	07/10/20 16:46	07/09/20	
Mercury	7471B	0.044	mg/Kg	0.015	0.002	1	07/14/20 11:09	07/14/20	
Selenium	6010C	ND U	mg/Kg	6.1	1.5	2	07/10/20 16:46	07/09/20	
Silver	6010C	ND U	mg/Kg	0.61	0.23	2	07/10/20 16:46	07/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003

Service Request: K2005398
Date Collected: 06/24/20 12:00
Date Received: 06/29/20 09:30

Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	8.3	mg/Kg	5.1	1.3	2	07/09/20 16:50	07/06/20	
Barium	6010C	142	mg/Kg	1.0	0.2	2	07/09/20 16:50	07/06/20	
Cadmium	6010C	0.66	mg/Kg	0.13	0.06	2	07/09/20 16:50	07/06/20	
Chromium	6010C	13.7	mg/Kg	0.51	0.19	2	07/09/20 16:50	07/06/20	
Lead	6010C	171	mg/Kg	1.3	0.5	2	07/09/20 16:50	07/06/20	
Mercury	7471B	0.176	mg/Kg	0.019	0.002	1	07/07/20 10:32	07/01/20	
Selenium	6010C	ND U	mg/Kg	5.1	1.3	2	07/09/20 16:50	07/06/20	
Silver	6010C	ND U	mg/Kg	0.51	0.19	2	07/09/20 16:50	07/06/20	



General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU-1
Lab Code: K2005398-001

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30
Basis: As Received

Inorganic Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Solids, Total	160.3 Modified	88.8	Percent	-	-	1	06/30/20 16:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU-1
Lab Code: K2005398-001

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30
Basis: Air Dried

Inorganic Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Solids, Total	160.3 Modified	98.0	Percent	-	-	1	07/07/20 14:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU-2
Lab Code: K2005398-002

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30
Basis: As Received

Inorganic Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Solids, Total	160.3 Modified	92.0	Percent	-	-	1	06/30/20 16:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU-2
Lab Code: K2005398-002

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20 09:30
Basis: Air Dried

Inorganic Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Solids, Total	160.3 Modified	98.8	Percent	-	-	1	07/07/20 14:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003

Service Request: K2005398
Date Collected: 06/24/20 12:00
Date Received: 06/29/20 09:30
Basis: As Received

Inorganic Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Solids, Total	160.3 Modified	77.5	Percent	-	-	1	06/30/20 16:39	



QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398

SURROGATE RECOVERY SUMMARY
Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Extraction Method: EPA 3546

Sample Name	Lab Code	Fluoranthene-d10	Fluorene-d10	Terphenyl-d14
		38-104	39-109	38-113
DU-1	K2005398-001	86	83	101
DU-2	K2005398-002	74	71	84
DU1 - L1 0.5-1.5'	K2005398-003	58	53	64
Method Blank	KQ2008823-04	81	74	76
Method Blank	KQ2009045-04	85	82	92
Lab Control Sample	KQ2008823-03	75	68	75
Lab Control Sample	KQ2009045-03	76	68	89
DU1 - L1 0.5-1.5'	KQ2008823-01	61	56	65
DU1 - L1 0.5-1.5'	KQ2008823-02	55	51	71
DU-1	KQ2009045-01	82	75	89
DU-1	KQ2009045-02	75	66	83

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/6/20
Date Extracted: 07/1/20

Duplicate Matrix Spike Summary
Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003
Analysis Method: 8270D
Prep Method: EPA 3546

Units: ug/Kg
Basis: Dry

Analyte Name	Sample		Matrix Spike KQ2008823-01		Duplicate Matrix Spike KQ2008823-02		% Rec Limits	RPD	RPD Limit	
	Result	Result	Spike Amount	% Rec	Result	Spike Amount				
2-Methylnaphthalene	51	477	632	67	452	638	63	28-98	5	40
Acenaphthene	26	438	632	65	531	638	79	30-101	19	40
Acenaphthylene	41	403	632	57	387	638	54	32-97	4	40
Anthracene	110	538	632	67	1280	638	183 *	27-116	82*	40
Benz(a)anthracene	500	1020	632	83	4070 E	638	560 *	27-127	120*	40
Benzo(a)pyrene	530	981	632	71	2970 E	638	383 *	25-129	101*	40
Benzo(b)fluoranthene	640	1170	632	83	3380 E	638	428 *	21-130	97*	40
Benzo(g,h,i)perylene	360	747	632	62	1510	638	181 *	17-130	68*	40
Benzo(k)fluoranthene	250	679	632	68	1530	638	200 *	22-126	77*	40
Chrysene	520	1010	632	78	3950 E	638	538 *	25-132	119*	40
Dibenz(a,h)anthracene	86	491	632	64	823	638	116	32-116	51*	40
Dibenzofuran	24	416	632	62	405	638	60	28-105	3	40
Fluoranthene	840	1390	632	87	5650 E	638	753 *	10-138	121*	40
Fluorene	28	423	632	62	515	638	76	23-116	20	40
Indeno(1,2,3-cd)pyrene	370	771	632	63	1750	638	216 *	17-138	78*	40
Naphthalene	44	397	632	56	374	638	52	29-88	6	40
Phenanthrene	470	895	632	67	3130 E	638	417 *	10-128	111*	40
Pyrene	1000	1490	632	75	7790 E	638	1062 *	16-134	136*	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/10/20
Date Extracted: 07/8/20

Duplicate Matrix Spike Summary
Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Sample Name: DU-1
Lab Code: K2005398-001
Analysis Method: 8270D
Prep Method: EPA 3546

Units: ug/Kg
Basis: Dry

Analyte Name	Sample		Matrix Spike KQ2009045-01		Duplicate Matrix Spike KQ2009045-02		% Rec Limits	RPD	RPD Limit	
	Result	Result	Spike Amount	% Rec	Result	Spike Amount				
2-Methylnaphthalene	2.9 J	346	525	65	335	522	64	28-98	3	40
Acenaphthene	4.7 J	364	525	68	350	522	66	30-101	4	40
Acenaphthylene	7.3	375	525	70	360	522	67	32-97	4	40
Anthracene	19	405	525	74	388	522	71	27-116	4	40
Benz(a)anthracene	110	480	525	71	490	522	73	27-127	2	40
Benzo(a)pyrene	130	531	525	76	543	522	79	25-129	2	40
Benzo(b)fluoranthene	160	522	525	69	550	522	75	21-130	5	40
Benzo(g,h,i)perylene	75	431	525	68	439	522	70	17-130	2	40
Benzo(k)fluoranthene	60	422	525	69	463	522	77	22-126	9	40
Chrysene	110	483	525	70	486	522	71	25-132	<1	40
Dibenz(a,h)anthracene	16	358	525	65	365	522	67	32-116	2	40
Dibenzofuran	3.3 J	385	525	73	367	522	70	28-105	5	40
Fluoranthene	210	550	525	65	552	522	66	10-138	<1	40
Fluorene	5.7	385	525	72	373	522	70	23-116	3	40
Indeno(1,2,3-cd)pyrene	84	455	525	71	467	522	73	17-138	2	40
Naphthalene	3.0 J	338	525	64	323	522	61	29-88	4	40
Phenanthrene	80	411	525	63	398	522	61	10-128	3	40
Pyrene	240	639	525	76	632	522	75	16-134	1	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2008823-04

Units: ug/Kg
Basis: Dry

Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2-Methylnaphthalene	ND U	4.9	0.37	1	07/06/20 07:38	7/1/20	
Acenaphthene	ND U	4.9	0.30	1	07/06/20 07:38	7/1/20	
Acenaphthylene	ND U	4.9	0.28	1	07/06/20 07:38	7/1/20	
Anthracene	ND U	4.9	0.29	1	07/06/20 07:38	7/1/20	
Benz(a)anthracene	0.46 J	4.9	0.23	1	07/06/20 07:38	7/1/20	
Benzo(a)pyrene	ND U	4.9	0.38	1	07/06/20 07:38	7/1/20	
Benzo(b)fluoranthene	0.77 J	4.9	0.38	1	07/06/20 07:38	7/1/20	
Benzo(g,h,i)perylene	ND U	4.9	0.40	1	07/06/20 07:38	7/1/20	
Benzo(k)fluoranthene	ND U	4.9	0.24	1	07/06/20 07:38	7/1/20	
Chrysene	ND U	4.9	0.31	1	07/06/20 07:38	7/1/20	
Dibenz(a,h)anthracene	ND U	4.9	0.23	1	07/06/20 07:38	7/1/20	
Dibenzofuran	ND U	4.9	0.60	1	07/06/20 07:38	7/1/20	
Fluoranthene	ND U	4.9	0.63	1	07/06/20 07:38	7/1/20	
Fluorene	ND U	4.9	0.57	1	07/06/20 07:38	7/1/20	
Indeno(1,2,3-cd)pyrene	ND U	4.9	0.36	1	07/06/20 07:38	7/1/20	
Naphthalene	ND U	4.9	0.47	1	07/06/20 07:38	7/1/20	
Phenanthrene	ND U	4.9	0.59	1	07/06/20 07:38	7/1/20	
Pyrene	ND U	4.9	0.32	1	07/06/20 07:38	7/1/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluoranthene-d10	81	38 - 104	07/06/20 07:38	
Fluorene-d10	74	39 - 109	07/06/20 07:38	
Terphenyl-d14	76	38 - 113	07/06/20 07:38	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2009045-04

Units: ug/Kg
Basis: Dry

Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2-Methylnaphthalene	0.49 J	4.5	0.37	1	07/10/20 05:43	7/8/20	
Acenaphthene	ND U	4.5	0.30	1	07/10/20 05:43	7/8/20	
Acenaphthylene	ND U	4.5	0.28	1	07/10/20 05:43	7/8/20	
Anthracene	ND U	4.5	0.29	1	07/10/20 05:43	7/8/20	
Benz(a)anthracene	0.40 J	4.5	0.23	1	07/10/20 05:43	7/8/20	
Benzo(a)pyrene	ND U	4.5	0.38	1	07/10/20 05:43	7/8/20	
Benzo(b)fluoranthene	ND U	4.5	0.38	1	07/10/20 05:43	7/8/20	
Benzo(g,h,i)perylene	ND U	4.5	0.40	1	07/10/20 05:43	7/8/20	
Benzo(k)fluoranthene	ND U	4.5	0.24	1	07/10/20 05:43	7/8/20	
Chrysene	ND U	4.5	0.31	1	07/10/20 05:43	7/8/20	
Dibenz(a,h)anthracene	ND U	4.5	0.23	1	07/10/20 05:43	7/8/20	
Dibenzofuran	0.64 J	4.5	0.60	1	07/10/20 05:43	7/8/20	
Fluoranthene	0.71 J	4.5	0.63	1	07/10/20 05:43	7/8/20	
Fluorene	ND U	4.5	0.57	1	07/10/20 05:43	7/8/20	
Indeno(1,2,3-cd)pyrene	ND U	4.5	0.36	1	07/10/20 05:43	7/8/20	
Naphthalene	0.65 J	4.5	0.47	1	07/10/20 05:43	7/8/20	
Phenanthrene	2.0 J	4.5	0.59	1	07/10/20 05:43	7/8/20	
Pyrene	0.51 J	4.5	0.32	1	07/10/20 05:43	7/8/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluoranthene-d10	85	38 - 104	07/10/20 05:43	
Fluorene-d10	82	39 - 109	07/10/20 05:43	
Terphenyl-d14	92	38 - 113	07/10/20 05:43	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/06/20
Date Extracted: 07/01/20

Lab Control Sample Summary
Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Units: ug/Kg
Basis: Dry
Analysis Lot: 686007

Lab Control Sample
KQ2008823-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
2-Methylnaphthalene	433	500	87	43-92
Acenaphthene	391	500	78	44-95
Acenaphthylene	365	500	73	44-93
Anthracene	387	500	77	46-100
Benz(a)anthracene	448	500	90	52-105
Benzo(a)pyrene	456	500	91	52-111
Benzo(b)fluoranthene	473	500	95	52-114
Benzo(g,h,i)perylene	452	500	90	45-107
Benzo(k)fluoranthene	454	500	91	52-112
Chrysene	433	500	87	51-110
Dibenz(a,h)anthracene	442	500	88	44-110
Dibenzofuran	379	500	76	44-96
Fluoranthene	411	500	82	49-102
Fluorene	372	500	74	45-98
Indeno(1,2,3-cd)pyrene	447	500	89	44-117
Naphthalene	351	500	70	42-88
Phenanthrene	376	500	75	41-99
Pyrene	458	500	92	48-104

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/10/20
Date Extracted: 07/08/20

Lab Control Sample Summary
Polycyclic Aromatic Hydrocarbons by GC/MS SIM

Analysis Method: 8270D
Prep Method: EPA 3546

Units: ug/Kg
Basis: Dry
Analysis Lot: 686616

Lab Control Sample
KQ2009045-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
2-Methylnaphthalene	320	500	64	43-92
Acenaphthene	339	500	68	44-95
Acenaphthylene	347	500	69	44-93
Anthracene	366	500	73	46-100
Benz(a)anthracene	383	500	77	52-105
Benzo(a)pyrene	420	500	84	52-111
Benzo(b)fluoranthene	397	500	79	52-114
Benzo(g,h,i)perylene	382	500	76	45-107
Benzo(k)fluoranthene	389	500	78	52-112
Chrysene	383	500	77	51-110
Dibenz(a,h)anthracene	369	500	74	44-110
Dibenzofuran	357	500	71	44-96
Fluoranthene	385	500	77	49-102
Fluorene	359	500	72	45-98
Indeno(1,2,3-cd)pyrene	387	500	77	44-117
Naphthalene	310	500	62	42-88
Phenanthrene	335	500	67	41-99
Pyrene	483	500	97	48-104



Semivolatile Organic Compounds by GC

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398

SURROGATE RECOVERY SUMMARY
Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Extraction Method: EPA 3550B

Sample Name	Lab Code	o-Terphenyl 51 - 126
DU-1	K2005398-001	113
DU-2	K2005398-002	117
DU1 - L1 0.5-1.5'	K2005398-003	102
DU1 - L1 0.5-1.5' MS	KWG2001878-1	102
DU1 - L1 0.5-1.5' DMS	KWG2001878-2	98
Lab Control Sample	KWG2001878-3	105
Method Blank	KWG2001878-4	99
DU-1 MS	KWG2001923-1	115
DU-1 DMS	KWG2001923-2	120
Lab Control Sample	KWG2001923-3	115
Method Blank	KWG2001923-4	111

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/8/20
Date Extracted: 07/1/20

Duplicate Matrix Spike Summary
Diesel Range Organics - Acid/Si Gel Treated

Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003
Analysis Method: 8015C
Prep Method: EPA 3550B

Units: mg/Kg
Basis: Dry

Analyte Name	Sample Result	Result	Matrix Spike KWG2001878-1		Result	Duplicate Matrix Spike KWG2001878-2		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
C10 - C28 DRO	150	386	342	70	365	333	65	23-144	6	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/9/20
Date Extracted: 07/8/20

Duplicate Matrix Spike Summary
Diesel Range Organics - Acid/Si Gel Treated

Sample Name: DU-1
Lab Code: K2005398-001
Analysis Method: 8015C
Prep Method: EPA 3550B

Units: mg/Kg
Basis: Dry

Analyte Name	Sample Result	Result	Matrix Spike KWG2001923-1		Result	Duplicate Matrix Spike KWG2001923-2		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
C10 - C28 DRO	12 H	293	263	107	317	271	112	23-144	8	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KWG2001878-4

Units: mg/Kg
Basis: Dry

Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
C10 - C28 DRO	3.3 J	9.7	2.6	1	07/07/20 23:49	7/1/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	99	51 - 126	07/07/20 23:49	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KWG2001923-4

Units: mg/Kg
Basis: Dry

Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
C10 - C28 DRO	2.8 J	9.7	2.6	1	07/09/20 13:06	7/8/20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	111	51 - 126	07/09/20 13:06	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/07/20
Date Extracted: 07/01/20

Lab Control Sample Summary
Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Units: mg/Kg
Basis: Dry
Analysis Lot: KWG2001926

Lab Control Sample
KWG2001878-3

<u>Analyte Name</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
C10 - C28 DRO	300	267	113	42-134

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/09/20
Date Extracted: 07/08/20

Lab Control Sample Summary
Diesel Range Organics - Acid/Si Gel Treated

Analysis Method: 8015C
Prep Method: EPA 3550B

Units: mg/Kg
Basis: Dry
Analysis Lot: KWG2001964

Lab Control Sample
KWG2001923-3

<u>Analyte Name</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
C10 - C28 DRO	295	267	110	42-134



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2008659-05

Service Request: K2005398
Date Collected: NA
Date Received: NA
Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7471B	ND U	mg/Kg	0.02	0.002	1	07/07/20 10:13	07/01/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2008826-03

Service Request: K2005398
Date Collected: NA
Date Received: NA
Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND U	mg/Kg	8	2.0	2	07/09/20 16:43	07/06/20	
Barium	6010C	ND U	mg/Kg	1.6	0.3	2	07/09/20 16:43	07/06/20	
Cadmium	6010C	ND U	mg/Kg	0.2	0.09	2	07/09/20 16:43	07/06/20	
Chromium	6010C	0.34 J	mg/Kg	0.8	0.30	2	07/09/20 16:43	07/06/20	
Lead	6010C	ND U	mg/Kg	2	0.7	2	07/09/20 16:43	07/06/20	
Selenium	6010C	ND U	mg/Kg	8	2.0	2	07/09/20 16:43	07/06/20	
Silver	6010C	ND U	mg/Kg	0.8	0.30	2	07/09/20 16:43	07/06/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2009042-03

Service Request: K2005398
Date Collected: NA
Date Received: NA
Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND U	mg/Kg	8	2.0	2	07/10/20 16:14	07/09/20	
Barium	6010C	ND U	mg/Kg	0.8	0.30	2	07/10/20 16:14	07/09/20	
Cadmium	6010C	ND U	mg/Kg	0.2	0.09	2	07/10/20 16:14	07/09/20	
Chromium	6010C	ND U	mg/Kg	0.8	0.30	2	07/10/20 16:14	07/09/20	
Lead	6010C	ND U	mg/Kg	2	0.7	2	07/10/20 16:14	07/09/20	
Selenium	6010C	ND U	mg/Kg	8	2.0	2	07/10/20 16:14	07/09/20	
Silver	6010C	ND U	mg/Kg	0.8	0.30	2	07/10/20 16:14	07/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2009044-03

Service Request: K2005398
Date Collected: NA
Date Received: NA
Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7471B	0.005 J	mg/Kg	0.02	0.002	1	07/14/20 10:59	07/14/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/9/20
Date Extracted: 07/6/20

Matrix Spike Summary
Total Metals

Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003
Analysis Method: 6010C
Prep Method: EPA 3050B

Units: mg/Kg
Basis: Dry

Matrix Spike
KQ2008826-02

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	8.3	68.3	61.4	98	75-125
Barium	142	256	123	93	75-125
Cadmium	0.66	6.25	6.14	91	75-125
Chromium	13.7	35.3	24.5	88	75-125
Lead	171	188	61.4	27 N	75-125
Selenium	ND U	52.4	61.4	85	75-125
Silver	ND U	5.80	6.14	94	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/10/20
Date Extracted: 07/9/20

Matrix Spike Summary
Total Metals

Sample Name: DU-1
Lab Code: K2005398-001
Analysis Method: 6010C
Prep Method: EPA 3050B

Units: mg/Kg
Basis: Dry

Matrix Spike
KQ2009042-02

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	5.4 J	79.2	77.5	95	75-125
Barium	114	272	155	102	75-125
Cadmium	0.24	7.31	7.75	91	75-125
Chromium	14.2	42.8	31.0	92	75-125
Lead	24.6	92.5	77.5	88	75-125
Selenium	ND U	65.7	77.5	85	75-125
Silver	ND U	6.86	7.75	89	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/14/20
Date Extracted: 07/14/20

Matrix Spike Summary
Total Metals

Sample Name: DU-1
Lab Code: K2005398-001
Analysis Method: 7471B
Prep Method: Method

Units: mg/Kg
Basis: Dry

Matrix Spike
KQ2009044-02

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Mercury	0.048	0.573	0.543	97	80-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/09/20

Replicate Sample Summary

Total Metals

Sample Name: DU1 - L1 0.5-1.5'
Lab Code: K2005398-003

Units: mg/Kg
Basis: Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate	Average	RPD	RPD Limit
					Sample KQ2008826-01 Result			
Arsenic	6010C	4.7	1.2	8.3	8.1	8.2	3	20
Barium	6010C	0.95	0.18	142	133	138	7	20
Cadmium	6010C	0.12	0.05	0.66	0.59	0.63	10	20
Chromium	6010C	0.47	0.18	13.7	14.3	14.0	5	20
Lead	6010C	1.2	0.4	171	148	160	15	20
Selenium	6010C	4.7	1.2	ND U	ND U	ND	-	20
Silver	6010C	0.47	0.18	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/10/20

Replicate Sample Summary

Total Metals

Sample Name: DU-1
Lab Code: K2005398-001

Units: mg/Kg
Basis: Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate	Average	RPD	RPD Limit
					Sample KQ2009042-01 Result			
Arsenic	6010C	7.4	1.8	5.4 J	5.9 J	5.7	10	20
Barium	6010C	0.74	0.28	114	157	136	32 *	20
Cadmium	6010C	0.18	0.08	0.24	0.30	0.27	21 #	20
Chromium	6010C	0.74	0.28	14.2	13.7	14.0	3	20
Lead	6010C	1.8	0.6	24.6	167	95.8	148 *	20
Selenium	6010C	7.4	1.8	ND U	ND U	ND	-	20
Silver	6010C	0.74	0.28	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 07/14/20

Replicate Sample Summary

Total Metals

Sample Name: DU-1
Lab Code: K2005398-001

Units: mg/Kg
Basis: Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate	Average	RPD	RPD Limit
					Sample KQ2009044-01 Result			
Mercury	7471B	0.022	0.002	0.048	0.052	0.050	11	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/07/20

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2008659-06

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7471B	19.0	26.6	71	41-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/09/20

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2008826-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	96.7	104	93	64-119
Barium	6010C	305	320	95	70-117
Cadmium	6010C	138	149	93	68-113
Chromium	6010C	144	155	93	66-123
Lead	6010C	86.4	92.4	94	70-130
Selenium	6010C	39.4	45.1	87	52-135
Silver	6010C	37.2	41.0	91	68-129

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/10/20

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2009042-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	87.2	104	84	64-119
Barium	6010C	283	320	88	70-117
Cadmium	6010C	126	149	85	68-113
Chromium	6010C	127	155	82	66-123
Lead	6010C	78.2	92.4	85	70-130
Selenium	6010C	35.0	45.1	78	52-135
Silver	6010C	32.9	41.0	80	68-129

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Analyzed: 07/14/20

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2009044-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7471B	20.0	26.6	75	41-110



General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Barr Engineering Company
Project: Bryn Mawr/23271806
Sample Matrix: Soil

Service Request: K2005398
Date Collected: 06/24/20
Date Received: 06/29/20
Date Analyzed: 06/30/20 - 07/07/20

Replicate Sample Summary
Inorganic Parameters

Sample Name: DU-1
Lab Code: K2005398-001

Units: Percent
Basis: As Received

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample K2005398-001DUP Result, Average, RPD, RPD Limit. Rows include Solids, Total with values 88.8, 89.8, 89.3, 1, 20 and 98.0, 97.9, 98.0, <1, 10.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

July 24, 2020

Ms. Andrea Nord
Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435

Work Order Number: 2002496
RE: 23271806

Enclosed are the results of analyses for samples received by the laboratory on 06/30/20. If you have any questions concerning this report, please feel free to contact me.

Results are not blank corrected unless noted within the report. Additionally, all QC results meet requirements unless noted.

The results in this report apply to the samples as received.

All samples will be retained by Legend Technical Services, Inc., unless consumed in the analysis, at ambient conditions for 30 days from the date of this report and then discarded unless other arrangements are made. All samples were received in acceptable condition unless otherwise noted.

All test results and QC meet requirements of the 2003 NELAC standard.

MDH (NELAP) Accreditation #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC



Digitally signed by Bach Pham
DN: cn=Bach Pham, o,ou,
email=bpham@legend-group.com,
c=US
Date: 2020.07.24 12:34:13 -05'00'

Bach Pham
Client Manager II
bpham@legend-group.com

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GP-01-20_0-4	2002496-01	Soil	06/29/20 12:00	06/30/20 09:25
GP-02-20_2-6	2002496-02	Soil	06/29/20 13:25	06/30/20 09:25
GP-03-20_0-4	2002496-03	Soil	06/29/20 14:00	06/30/20 09:25
GP-01-20	2002496-04	Groundwater	06/29/20 15:30	06/30/20 09:25
GP-02-20_3-3	2002496-05	Soil	06/29/20 13:25	06/30/20 09:25
GP-03-20_3-3	2002496-06	Soil	06/29/20 14:00	06/30/20 09:25
Trip Blank	2002496-07	Methanol	06/29/20 00:00	06/30/20 09:25

Shipping Container Information

Default Cooler Temperature (°C): 0.7

Received on ice: Yes Temperature blank was present Received on ice pack: No
 Received on melt water: No Ambient: No Acceptable (IH/ISO only): No
 Custody seals: No

Case Narrative:

The spike recoveries for Barium and Lead were outside laboratory acceptance limits in the 6010D batch B0G0116 MS, and the spike recovery for Mercury was below laboratory acceptance limits in the MSD. All remaining spike recoveries were within acceptance limits in the batch LCS/LCSD. The MS/MSD source sample was GP-01-20_0-4.

An LCS/LCSD was prepared and analyzed for 8270E batch B0G0719 instead of the method specified LCS/MS/MSD. Insufficient sample was received to meet method QC requirements.

The DRO chromatograms are attached for all soil samples.

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20_0-4 (2002496-01) Soil Sampled: 06/29/20 12:00 Received: 06/30/20 9:25										
DRO (Silica Gel Cleanup)	33	5.5	2.7	mg/kg dry	1	B0G0117	07/01/20	07/10/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	94.9			56.8-136 %		"	"	"	"	
GP-02-20_2-6 (2002496-02) Soil Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
DRO (Silica Gel Cleanup)	140	5.3	2.6	mg/kg dry	1	B0G0117	07/01/20	07/10/20	WI(95)DRO(M)	D-04
Surrogate: Triacontane (C-30) (Silica Gel)	89.5			56.8-136 %		"	"	"	"	
GP-03-20_0-4 (2002496-03) Soil Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
DRO (Silica Gel Cleanup)	14	4.7	2.3	mg/kg dry	1	B0G0117	07/01/20	07/10/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	99.9			56.8-136 %		"	"	"	"	
GP-01-20 (2002496-04) Groundwater Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
DRO (Silica Gel Cleanup)	<110	110	58	ug/L	1	B0G0610	07/06/20	07/10/20	WI(95)DRO(M)	PH2
Surrogate: Triacontane (C-30) (Silica Gel)	114			57.9-117 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20 (2002496-04) Groundwater Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
Gasoline range organics	<100	100	31	ug/L	1	B0F3016	06/30/20	06/30/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	106			80-150 %		"	"	"	"	
GP-02-20_3-3 (2002496-05) Soil Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
Gasoline range organics	<5.6	5.6	1.9	mg/kg dry	1	B0G0708	07/07/20	07/08/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	119			80-150 %		"	"	"	"	
GP-03-20_3-3 (2002496-06) Soil Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
Gasoline range organics	<5.6	5.6	1.9	mg/kg dry	1	B0G0708	07/07/20	07/08/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	116			80-150 %		"	"	"	"	
Trip Blank (2002496-07) Methanol Sampled: 06/29/20 00:00 Received: 06/30/20 9:25										
Gasoline range organics	<5.0	5.0	1.7	mg/kg wet	1	B0G0708	07/07/20	07/07/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	115			80-150 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

DISSOLVED METAL ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20 (2002496-04) Groundwater Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
Arsenic	<0.020	0.020	0.013	mg/L	1	B0G0707	07/07/20	07/09/20	EPA 6010D (Dissolved)	
Barium	0.30	0.020	0.00092	mg/L	1	"	"	"	"	"
Cadmium	<0.0010	0.0010	0.00023	mg/L	1	"	"	"	"	"
Chromium	<0.010	0.010	0.00039	mg/L	1	"	"	"	"	"
Lead	<0.015	0.015	0.0019	mg/L	1	"	"	"	"	"
Mercury	<0.010	0.010	0.0033	mg/L	1	"	"	"	"	"
Selenium	<0.050	0.050	0.0060	mg/L	1	"	"	"	"	"
Silver	<0.010	0.010	0.00081	mg/L	1	"	"	07/10/20	"	"

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20_0-4 (2002496-01) Soil Sampled: 06/29/20 12:00 Received: 06/30/20 9:25										
Arsenic	3.5	1.1	0.72	mg/kg dry	1	B0G0116	07/01/20	07/02/20	EPA 6010D	
Barium	81	1.1	0.052	mg/kg dry	1	"	"	"	"	M2
Cadmium	0.24	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	10	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	110	0.84	0.11	mg/kg dry	1	"	"	"	"	M1
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	M2
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	
GP-02-20_2-6 (2002496-02) Soil Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
Arsenic	5.2	1.1	0.72	mg/kg dry	1	B0G0116	07/01/20	07/02/20	EPA 6010D	
Barium	53	1.1	0.052	mg/kg dry	1	"	"	"	"	
Cadmium	0.14	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	15	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	24	0.84	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	
GP-03-20_0-4 (2002496-03) Soil Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
Arsenic	4.7	1.1	0.71	mg/kg dry	1	B0G0116	07/01/20	07/02/20	EPA 6010D	
Barium	42	1.1	0.051	mg/kg dry	1	"	"	"	"	
Cadmium	0.14	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	12	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	16	0.83	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20_0-4 (2002496-01) Soil										D1
Sampled: 06/29/20 12:00 Received: 06/30/20 9:25										
2-Chloronaphthalene	<0.93	0.93	0.10	mg/kg dry	2.5	B0G0606	07/06/20	07/07/20	EPA 8270E	
2-Methylnaphthalene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Acenaphthene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Acenaphthylene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Anthracene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Benzo(a)anthracene	1.5	0.93	0.17	mg/kg dry	2.5	"	"	"	"	
Benzo(a)pyrene	1.2	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Benzo(b)fluoranthene	1.5	0.93	0.13	mg/kg dry	2.5	"	"	"	"	
Benzo(g,h,i)perylene	<0.93	0.93	0.18	mg/kg dry	2.5	"	"	"	"	
Benzo(k)fluoranthene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Chrysene	1.4	0.93	0.15	mg/kg dry	2.5	"	"	"	"	
Dibenz(a,h)anthracene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Fluoranthene	2.5	0.93	0.15	mg/kg dry	2.5	"	"	"	"	
Fluorene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Naphthalene	<0.93	0.93	0.096	mg/kg dry	2.5	"	"	"	"	
Phenanthrene	<0.93	0.93	0.13	mg/kg dry	2.5	"	"	"	"	
Pyrene	2.1	0.93	0.16	mg/kg dry	2.5	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	58.9			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	53.5			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	84.0			36.6-110 %		"	"	"	"	
GP-02-20_2-6 (2002496-02) Soil										D1
Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
2-Chloronaphthalene	<0.93	0.93	0.10	mg/kg dry	2.5	B0G0606	07/06/20	07/07/20	EPA 8270E	
2-Methylnaphthalene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Acenaphthene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Acenaphthylene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Anthracene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Benzo(a)anthracene	<0.93	0.93	0.17	mg/kg dry	2.5	"	"	"	"	
Benzo(a)pyrene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Benzo(b)fluoranthene	<0.93	0.93	0.13	mg/kg dry	2.5	"	"	"	"	
Benzo(g,h,i)perylene	<0.93	0.93	0.18	mg/kg dry	2.5	"	"	"	"	
Benzo(k)fluoranthene	<0.93	0.93	0.10	mg/kg dry	2.5	"	"	"	"	
Chrysene	<0.93	0.93	0.15	mg/kg dry	2.5	"	"	"	"	
Dibenz(a,h)anthracene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Fluoranthene	<0.93	0.93	0.15	mg/kg dry	2.5	"	"	"	"	
Fluorene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.93	0.93	0.12	mg/kg dry	2.5	"	"	"	"	
Naphthalene	<0.93	0.93	0.096	mg/kg dry	2.5	"	"	"	"	
Phenanthrene	<0.93	0.93	0.13	mg/kg dry	2.5	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-02-20_2-6 (2002496-02) Soil										D1
Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
Pyrene	<0.93	0.93	0.16	mg/kg dry	2.5	B0G0606	07/06/20	07/07/20	EPA 8270E	
Surrogate: 2-Fluorobiphenyl	64.4			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	67.3			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	80.9			36.6-110 %		"	"	"	"	
GP-03-20_0-4 (2002496-03) Soil										
Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
2-Chloronaphthalene	<0.37	0.37	0.040	mg/kg dry	1	B0G0606	07/06/20	07/07/20	EPA 8270E	
2-Methylnaphthalene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.37	0.37	0.041	mg/kg dry	1	"	"	"	"	
Anthracene	<0.37	0.37	0.047	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.37	0.37	0.066	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.37	0.37	0.051	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.37	0.37	0.071	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.37	0.37	0.041	mg/kg dry	1	"	"	"	"	
Chrysene	<0.37	0.37	0.060	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.37	0.37	0.048	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.37	0.37	0.060	mg/kg dry	1	"	"	"	"	
Fluorene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.37	0.37	0.038	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.37	0.37	0.050	mg/kg dry	1	"	"	"	"	
Pyrene	<0.37	0.37	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	77.6			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	78.8			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	80.9			36.6-110 %		"	"	"	"	
GP-01-20 (2002496-04) Groundwater										H4
Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
2-Chloronaphthalene	<10	10	0.32	ug/L	1	B0G0719	07/07/20	07/08/20	EPA 8270E	
2-Methylnaphthalene	<10	10	0.33	ug/L	1	"	"	"	"	
Acenaphthene	<10	10	0.31	ug/L	1	"	"	"	"	
Acenaphthylene	<10	10	0.43	ug/L	1	"	"	"	"	
Anthracene	<10	10	0.43	ug/L	1	"	"	"	"	
Benzo(a)anthracene	<10	10	0.44	ug/L	1	"	"	"	"	
Benzo(a)pyrene	<10	10	0.50	ug/L	1	"	"	"	"	
Benzo(b)fluoranthene	<10	10	0.63	ug/L	1	"	"	"	"	
Benzo(g,h,i)perylene	<10	10	1.2	ug/L	1	"	"	"	"	
Benzo(k)fluoranthene	<10	10	0.49	ug/L	1	"	"	"	"	
Chrysene	<10	10	0.36	ug/L	1	"	"	"	"	
Dibenz(a,h)anthracene	<10	10	1.2	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20 (2002496-04) Groundwater										H4
Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
Fluoranthene	<10	10	0.75	ug/L	1	B0G0719	07/07/20	07/08/20	EPA 8270E	
Fluorene	<10	10	0.56	ug/L	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<10	10	1.1	ug/L	1	"	"	"	"	
Naphthalene	<10	10	0.31	ug/L	1	"	"	"	"	
Phenanthrene	<10	10	0.41	ug/L	1	"	"	"	"	
Pyrene	<10	10	0.84	ug/L	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	72.9			67.5-90.8 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	74.3			57.2-94.4 %		"	"	"	"	
Surrogate: Terphenyl-d14	31.9			30-82.6 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20_0-4 (2002496-01) Soil	Sampled: 06/29/20 12:00		Received: 06/30/20 9:25							
% Solids	89			%	1	B0G0810	07/08/20	07/08/20	% calculation	
GP-02-20_2-6 (2002496-02) Soil	Sampled: 06/29/20 13:25		Received: 06/30/20 9:25							
% Solids	89			%	1	B0G0810	07/08/20	07/08/20	% calculation	
GP-03-20_0-4 (2002496-03) Soil	Sampled: 06/29/20 14:00		Received: 06/30/20 9:25							
% Solids	90			%	1	B0G0810	07/08/20	07/08/20	% calculation	
GP-02-20_3-3 (2002496-05) Soil	Sampled: 06/29/20 13:25		Received: 06/30/20 9:25							
% Solids	89			%	1	B0G0810	07/08/20	07/08/20	% calculation	
GP-03-20_3-3 (2002496-06) Soil	Sampled: 06/29/20 14:00		Received: 06/30/20 9:25							
% Solids	90			%	1	B0G0810	07/08/20	07/08/20	% calculation	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20 (2002496-04) Groundwater Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.13	ug/L	1	B0G0210	07/02/20	07/03/20	EPA 8260D	
1,1,1-Trichloroethane	<1.0	1.0	0.060	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.094	ug/L	1	"	"	"	"	
1,1-Dichloroethane	<1.0	1.0	0.066	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.096	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.53	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.053	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.63	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.15	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.24	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.18	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.33	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.13	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.067	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.12	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.43	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.49	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.089	ug/L	1	"	"	"	"	
2-Butanone	<20	20	2.1	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.32	ug/L	1	"	"	"	"	
Acetone	<20	20	5.0	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.19	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.059	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.23	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.081	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.24	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.075	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.36	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.097	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-01-20 (2002496-04) Groundwater Sampled: 06/29/20 15:30 Received: 06/30/20 9:25										
cis-1,3-Dichloropropene	<1.0	1.0	0.23	ug/L	1	B0G0210	07/02/20	07/03/20	EPA 8260D	
Dibromochloromethane	<2.5	2.5	0.10	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.19	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.046	ug/L	1	"	"	"	"	T5
Ethyl ether	<5.0	5.0	0.039	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.14	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.27	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.57	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.29	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.063	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.98	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.34	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.36	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.76	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.12	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.21	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.063	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	1.5	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.26	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.54	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.073	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.1			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	95.4			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	94.1			80-120 %		"	"	"	"	

GP-02-20_3-3 (2002496-05) Soil Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
1,1,1,2-Tetrachloroethane	<0.22	0.22	0.012	mg/kg dry	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
1,1,1-Trichloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-02-20_3-3 (2002496-05) Soil Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
1,1-Dichloroethene	<0.22	0.22	0.0060	mg/kg dry	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
1,1-Dichloropropene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.035	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.56	0.56	0.026	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.22	0.22	0.0091	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.22	0.22	0.0080	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.22	0.22	0.030	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.044	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.061	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.22	0.22	0.0099	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
Bromoform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.22	0.22	0.054	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.22	0.22	0.0066	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Chloroform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-02-20_3-3 (2002496-05) Soil Sampled: 06/29/20 13:25 Received: 06/30/20 9:25										
Ethylbenzene	<0.22	0.22	0.010	mg/kg dry	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
Hexachlorobutadiene	<0.56	0.56	0.035	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.45	0.45	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.56	0.56	0.027	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.22	0.22	0.0083	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.22	0.22	0.0060	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.22	0.22	0.0069	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.22	0.22	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.22	0.22	0.027	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.6			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	94.2			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	96.1			80-120 %		"	"	"	"	

GP-03-20_3-3 (2002496-06) Soil Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
1,1,1,2-Tetrachloroethane	<0.22	0.22	0.012	mg/kg dry	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
1,1,1-Trichloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.22	0.22	0.0059	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-03-20_3-3 (2002496-06) Soil Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
1,2-Dibromo-3-chloropropane	<0.56	0.56	0.026	mg/kg dry	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
1,2-Dibromoethane (EDB)	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.22	0.22	0.0090	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.22	0.22	0.0079	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.22	0.22	0.030	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.043	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.060	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.22	0.22	0.0098	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
Bromoform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.22	0.22	0.053	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.22	0.22	0.0066	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Chloroform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.22	0.22	0.0099	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.44	0.44	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-03-20_3-3 (2002496-06) Soil Sampled: 06/29/20 14:00 Received: 06/30/20 9:25										
Methylene chloride	<0.56	0.56	0.027	mg/kg dry	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
Naphthalene	<0.56	0.56	0.033	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.22	0.22	0.0082	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.22	0.22	0.0059	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.22	0.22	0.0068	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.22	0.22	0.0094	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.22	0.22	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.22	0.22	0.027	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.9			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	96.0			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	96.8			80-120 %		"	"	"	"	

Trip Blank (2002496-07) Methanol Sampled: 06/29/20 00:00 Received: 06/30/20 9:25										
1,1,1,2-Tetrachloroethane	<0.20	0.20	0.011	mg/kg wet	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
1,1,1-Trichloroethane	<0.20	0.20	0.019	mg/kg wet	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
1,1,2-Trichloroethane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.20	0.20	0.018	mg/kg wet	1	"	"	"	"	
1,1-Dichloroethane	<0.20	0.20	0.0092	mg/kg wet	1	"	"	"	"	
1,1-Dichloroethene	<0.20	0.20	0.0053	mg/kg wet	1	"	"	"	"	
1,1-Dichloropropene	<0.20	0.20	0.013	mg/kg wet	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.50	0.50	0.031	mg/kg wet	1	"	"	"	"	
1,2,3-Trichloropropane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.50	0.50	0.032	mg/kg wet	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.50	0.50	0.023	mg/kg wet	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.20	0.20	0.013	mg/kg wet	1	"	"	"	"	
1,2-Dichlorobenzene	<0.20	0.20	0.0081	mg/kg wet	1	"	"	"	"	
1,2-Dichloroethane	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
1,2-Dichloropropane	<0.20	0.20	0.0071	mg/kg wet	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.20	0.20	0.012	mg/kg wet	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (2002496-07) Methanol Sampled: 06/29/20 00:00 Received: 06/30/20 9:25										
1,3-Dichlorobenzene	<0.20	0.20	0.013	mg/kg wet	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
1,3-Dichloropropane	<0.20	0.20	0.0090	mg/kg wet	1	"	"	"	"	
1,4-Dichlorobenzene	<0.20	0.20	0.0098	mg/kg wet	1	"	"	"	"	
2,2-Dichloropropane	<0.20	0.20	0.027	mg/kg wet	1	"	"	"	"	
2-Butanone	<1.0	1.0	0.039	mg/kg wet	1	"	"	"	"	
2-Chlorotoluene	<0.20	0.20	0.0090	mg/kg wet	1	"	"	"	"	
4-Chlorotoluene	<0.20	0.20	0.015	mg/kg wet	1	"	"	"	"	
Acetone	<1.0	1.0	0.054	mg/kg wet	1	"	"	"	"	
Allyl chloride	<0.20	0.20	0.010	mg/kg wet	1	"	"	"	"	
Benzene	<0.20	0.20	0.0088	mg/kg wet	1	"	"	"	"	
Bromobenzene	<0.20	0.20	0.017	mg/kg wet	1	"	"	"	"	
Bromochloromethane	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Bromodichloromethane	<0.20	0.20	0.0086	mg/kg wet	1	"	"	"	"	
Bromoform	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Bromomethane	<0.20	0.20	0.048	mg/kg wet	1	"	"	"	"	
Carbon tetrachloride	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
Chlorobenzene	<0.20	0.20	0.0059	mg/kg wet	1	"	"	"	"	
Chloroethane	<0.20	0.20	0.019	mg/kg wet	1	"	"	"	"	
Chloroform	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Chloromethane	<0.20	0.20	0.013	mg/kg wet	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.20	0.20	0.0098	mg/kg wet	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
Dibromochloromethane	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
Dibromomethane	<0.20	0.20	0.019	mg/kg wet	1	"	"	"	"	
Dichlorodifluoromethane	<0.20	0.20	0.026	mg/kg wet	1	"	"	"	"	
Dichlorofluoromethane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	T5
Ethyl ether	<0.20	0.20	0.012	mg/kg wet	1	"	"	"	"	
Ethylbenzene	<0.20	0.20	0.0089	mg/kg wet	1	"	"	"	"	
Hexachlorobutadiene	<0.50	0.50	0.031	mg/kg wet	1	"	"	"	"	
Isopropylbenzene	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
m,p-Xylene	<0.40	0.40	0.024	mg/kg wet	1	"	"	"	"	
Methyl isobutyl ketone	<0.20	0.20	0.026	mg/kg wet	1	"	"	"	"	
Methyl tert-butyl ether	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Methylene chloride	<0.50	0.50	0.024	mg/kg wet	1	"	"	"	"	
Naphthalene	<0.50	0.50	0.030	mg/kg wet	1	"	"	"	"	
n-Butylbenzene	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
n-Propylbenzene	<0.20	0.20	0.018	mg/kg wet	1	"	"	"	"	
o-Xylene	<0.20	0.20	0.0074	mg/kg wet	1	"	"	"	"	
p-Isopropyltoluene	<0.20	0.20	0.0086	mg/kg wet	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (2002496-07) Methanol Sampled: 06/29/20 00:00 Received: 06/30/20 9:25										
sec-Butylbenzene	<0.20	0.20	0.011	mg/kg wet	1	B0G0620	07/03/20	07/03/20	EPA 8260D	
Styrene	<0.20	0.20	0.0053	mg/kg wet	1	"	"	"	"	
tert-Butylbenzene	<0.20	0.20	0.0061	mg/kg wet	1	"	"	"	"	
Tetrachloroethene	<0.20	0.20	0.010	mg/kg wet	1	"	"	"	"	
Tetrahydrofuran	<1.0	1.0	0.096	mg/kg wet	1	"	"	"	"	
Toluene	<0.20	0.20	0.0085	mg/kg wet	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.20	0.20	0.012	mg/kg wet	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.20	0.20	0.010	mg/kg wet	1	"	"	"	"	
Trichloroethene	<0.20	0.20	0.0034	mg/kg wet	1	"	"	"	"	
Trichlorofluoromethane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
Vinyl chloride	<0.20	0.20	0.024	mg/kg wet	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.7			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	94.3			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	94.6			80-120 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

DRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G0117 - Sonication (Wisc DRO)											
Blank (B0G0117-BLK1)						Prepared: 07/01/20 Analyzed: 07/08/20					
DRO (Silica Gel Cleanup)	< 8.0	8.0	3.9	mg/kg wet							
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	16.6			mg/kg wet	16.0		104	56.8-136			
LCS (B0G0117-BS1)						Prepared: 07/01/20 Analyzed: 07/08/20					
DRO (Silica Gel Cleanup)	58.8	8.0	3.9	mg/kg wet	64.0	<8.0	91.9	70-120			
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	13.7			mg/kg wet	16.0		85.7	56.8-136			
LCS Dup (B0G0117-BSD1)						Prepared: 07/01/20 Analyzed: 07/10/20					
DRO (Silica Gel Cleanup)	59.0	8.0	3.9	mg/kg wet	64.0	<8.0	92.3	70-120	0.434	20	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	13.9			mg/kg wet	16.0		86.6	56.8-136			
Batch B0G0610 - EPA 3510C (Sep Funnel)											
Blank (B0G0610-BLK1)						Prepared: 07/06/20 Analyzed: 07/10/20					
DRO (Silica Gel Cleanup)	< 100	100	52	ug/L							
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	439			ug/L	400		110	57.9-117			
LCS (B0G0610-BS1)						Prepared: 07/06/20 Analyzed: 07/10/20					
DRO (Silica Gel Cleanup)	1640	100	52	ug/L	1600	<100	103	75-115			
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	417			ug/L	400		104	57.9-117			
LCS Dup (B0G0610-BSD1)						Prepared: 07/06/20 Analyzed: 07/10/20					
DRO (Silica Gel Cleanup)	1720	100	52	ug/L	1600	<100	107	75-115	4.44	20	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	408			ug/L	400		102	57.9-117			
Duplicate (B0G0610-DUP1)						Source: 2002525-01 Prepared: 07/06/20 Analyzed: 07/10/20					
DRO (Silica Gel Cleanup)	< 100	100	52	ug/L		<100			NA	33.2	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	466			ug/L	400		116	57.9-117			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

WI(95) GRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0F3016 - EPA 5030C Water (Purge and Trap)											
Blank (B0F3016-BLK1) Prepared & Analyzed: 06/30/20											
Gasoline range organics	< 100	100	31	ug/L							
Surrogate: 4-Fluorochlorobenzene	21.5			ug/L	20.0		108	80-150			
LCS (B0F3016-BS1) Prepared & Analyzed: 06/30/20											
Gasoline range organics	939	100	31	ug/L	1000	<100	93.9	80-120			
Surrogate: 4-Fluorochlorobenzene	23.5			ug/L	20.0		117	80-150			
LCS Dup (B0F3016-BSD1) Prepared & Analyzed: 06/30/20											
Gasoline range organics	962	100	31	ug/L	1000	<100	96.2	80-120	2.47	20	
Surrogate: 4-Fluorochlorobenzene	23.4			ug/L	20.0		117	80-150			
Duplicate (B0F3016-DUP1) Source: 2002426-06 Prepared & Analyzed: 06/30/20											
Gasoline range organics	< 100	100	31	ug/L		<100			NA	20	
Surrogate: 4-Fluorochlorobenzene	21.4			ug/L	20.0		107	80-150			
Batch B0G0708 - EPA 5035A Soil (Purge and Trap)											
Blank (B0G0708-BLK1) Prepared & Analyzed: 07/07/20											
Gasoline range organics	< 5.0	5.0	1.7	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	23.2			ug/L	20.0		116	80-150			
LCS (B0G0708-BS1) Prepared & Analyzed: 07/07/20											
Gasoline range organics	958			ug/L	1000		95.8	80-120			
Surrogate: 4-Fluorochlorobenzene	25.7			ug/L	20.0		128	80-150			
LCS Dup (B0G0708-BSD1) Prepared: 07/07/20 Analyzed: 07/08/20											
Gasoline range organics	949			ug/L	1000		94.9	80-120	0.945	20	
Surrogate: 4-Fluorochlorobenzene	25.0			ug/L	20.0		125	80-150			
Duplicate (B0G0708-DUP1) Source: 2002549-01 Prepared & Analyzed: 07/07/20											
Gasoline range organics	30.6	5.3	1.8	mg/kg dry		26.8			13.5	20	H
Surrogate: 4-Fluorochlorobenzene	22.2			ug/L	20.0		111	80-150			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0707 - EPA 200.7/3005A Digestion

Blank (B0G0707-BLK1)

Prepared: 07/07/20 Analyzed: 07/09/20

Arsenic	< 0.020	0.020	0.013	mg/L							
Barium	< 0.020	0.020	0.00092	mg/L							
Cadmium	< 0.0010	0.0010	0.00023	mg/L							
Chromium	< 0.010	0.010	0.00039	mg/L							
Lead	< 0.015	0.015	0.0019	mg/L							
Mercury	< 0.010	0.010	0.0033	mg/L							
Selenium	< 0.050	0.050	0.0060	mg/L							
Silver	< 0.010	0.010	0.00081	mg/L							

LCS (B0G0707-BS1)

Prepared: 07/07/20 Analyzed: 07/09/20

Arsenic	0.353	0.020	0.013	mg/L	0.399	<0.020	88.4	80-120			
Barium	0.369	0.020	0.00092	mg/L	0.399	<0.020	92.5	80-120			
Cadmium	0.390	0.0010	0.00023	mg/L	0.399	<0.0010	97.8	80-120			
Chromium	0.370	0.010	0.00039	mg/L	0.399	<0.010	92.7	80-120			
Lead	0.381	0.015	0.0019	mg/L	0.399	<0.015	95.5	80-120			
Mercury	0.211	0.010	0.0033	mg/L	0.250	<0.010	84.3	80-120			
Selenium	0.356	0.050	0.0060	mg/L	0.399	<0.050	89.3	80-120			
Silver	0.0368	0.010	0.00081	mg/L	0.0399	<0.010	92.2	80-120			

LCS Dup (B0G0707-BSD1)

Prepared: 07/07/20 Analyzed: 07/09/20

Arsenic	0.350	0.020	0.013	mg/L	0.399	<0.020	87.6	80-120	0.854	20	
Barium	0.363	0.020	0.00092	mg/L	0.399	<0.020	91.1	80-120	1.50	20	
Cadmium	0.388	0.0010	0.00023	mg/L	0.399	<0.0010	97.3	80-120	0.514	20	
Chromium	0.367	0.010	0.00039	mg/L	0.399	<0.010	91.9	80-120	0.896	20	
Lead	0.379	0.015	0.0019	mg/L	0.399	<0.015	95.0	80-120	0.526	20	
Mercury	0.207	0.010	0.0033	mg/L	0.250	<0.010	82.8	80-120	1.82	20	
Selenium	0.355	0.050	0.0060	mg/L	0.399	<0.050	89.0	80-120	0.365	20	
Silver	0.0372	0.010	0.00081	mg/L	0.0399	<0.010	93.2	80-120	1.08	20	

Matrix Spike (B0G0707-MS1)

Source: 2002496-04

Prepared: 07/07/20 Analyzed: 07/09/20

Arsenic	0.363	0.020	0.013	mg/L	0.399	<0.020	91.1	75-125			
Barium	0.647	0.020	0.00092	mg/L	0.399	0.302	86.3	75-125			
Cadmium	0.381	0.0010	0.00023	mg/L	0.399	<0.0010	95.4	75-125			
Chromium	0.365	0.010	0.00039	mg/L	0.399	<0.010	91.4	75-125			
Lead	0.364	0.015	0.0019	mg/L	0.399	<0.015	91.3	75-125			
Mercury	0.216	0.010	0.0033	mg/L	0.250	<0.010	86.4	75-125			
Selenium	0.366	0.050	0.0060	mg/L	0.399	<0.050	91.8	75-125			
Silver	0.0374	0.010	0.00081	mg/L	0.0399	<0.010	93.7	75-125			

Matrix Spike Dup (B0G0707-MSD1)

Source: 2002496-04

Prepared: 07/07/20 Analyzed: 07/09/20

Arsenic	0.372	0.020	0.013	mg/L	0.399	<0.020	93.1	75-125	2.23	20	
Barium	0.670	0.020	0.00092	mg/L	0.399	0.302	92.1	75-125	3.51	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G0707 - EPA 200.7/3005A Digestion											
Matrix Spike Dup (B0G0707-MSD1)											
	Source: 2002496-04				Prepared: 07/07/20		Analyzed: 07/09/20				
Cadmium	0.388	0.0010	0.00023	mg/L	0.399	<0.0010	97.2	75-125	1.87	20	
Chromium	0.373	0.010	0.00039	mg/L	0.399	<0.010	93.5	75-125	2.20	20	
Lead	0.370	0.015	0.0019	mg/L	0.399	<0.015	92.7	75-125	1.53	20	
Mercury	0.224	0.010	0.0033	mg/L	0.250	<0.010	89.4	75-125	3.41	20	
Selenium	0.368	0.050	0.0060	mg/L	0.399	<0.050	92.1	75-125	0.354	20	
Silver	0.0382	0.010	0.00081	mg/L	0.0399	<0.010	95.7	75-125	2.12	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0116 - EPA 3050B (M)

Blank (B0G0116-BLK1)

Prepared: 07/01/20 Analyzed: 07/02/20

Arsenic	< 1.0	1.0	0.64	mg/kg wet							
Barium	< 1.0	1.0	0.046	mg/kg wet							
Cadmium	< 0.050	0.050	0.011	mg/kg wet							
Chromium	< 0.50	0.50	0.020	mg/kg wet							
Lead	< 0.75	0.75	0.095	mg/kg wet							
Mercury	< 0.50	0.50	0.17	mg/kg wet							
Selenium	< 2.5	2.5	0.30	mg/kg wet							
Silver	< 0.50	0.50	0.041	mg/kg wet							

LCS (B0G0116-BS1)

Prepared: 07/01/20 Analyzed: 07/02/20

Arsenic	37.8	1.0	0.64	mg/kg wet	39.9	<1.0	94.7	80-120			
Barium	39.6	1.0	0.046	mg/kg wet	39.9	<1.0	99.4	80-120			
Cadmium	40.9	0.050	0.011	mg/kg wet	39.9	<0.050	102	80-120			
Chromium	40.7	0.50	0.020	mg/kg wet	39.9	<0.50	102	80-120			
Lead	40.2	0.75	0.095	mg/kg wet	39.9	<0.75	101	80-120			
Mercury	11.3	0.50	0.17	mg/kg wet	12.5	<0.50	90.4	80-120			
Selenium	37.9	2.5	0.30	mg/kg wet	39.9	<2.5	94.9	80-120			
Silver	3.85	0.50	0.041	mg/kg wet	3.99	<0.50	96.5	80-120			

LCS Dup (B0G0116-BSD1)

Prepared: 07/01/20 Analyzed: 07/02/20

Arsenic	36.2	1.0	0.64	mg/kg wet	39.9	<1.0	90.8	80-120	4.20	20	
Barium	38.6	1.0	0.046	mg/kg wet	39.9	<1.0	96.8	80-120	2.61	20	
Cadmium	39.1	0.050	0.011	mg/kg wet	39.9	<0.050	98.0	80-120	4.45	20	
Chromium	39.0	0.50	0.020	mg/kg wet	39.9	<0.50	97.7	80-120	4.44	20	
Lead	38.6	0.75	0.095	mg/kg wet	39.9	<0.75	96.8	80-120	4.07	20	
Mercury	11.1	0.50	0.17	mg/kg wet	12.5	<0.50	89.0	80-120	1.65	20	
Selenium	36.1	2.5	0.30	mg/kg wet	39.9	<2.5	90.5	80-120	4.80	20	
Silver	3.68	0.50	0.041	mg/kg wet	3.99	<0.50	92.4	80-120	4.38	20	

Matrix Spike (B0G0116-MS1)

Source: 2002496-01

Prepared: 07/01/20 Analyzed: 07/02/20

Arsenic	41.9	1.1	0.72	mg/kg dry	44.3	3.51	86.7	75-125			
Barium	112	1.1	0.052	mg/kg dry	44.3	80.6	70.0	75-125			M2
Cadmium	40.4	0.056	0.012	mg/kg dry	44.3	0.242	90.7	75-125			
Chromium	51.0	0.56	0.022	mg/kg dry	44.3	10.3	91.8	75-125			
Lead	188	0.84	0.11	mg/kg dry	44.3	110	176	75-125			M1
Mercury	11.4	0.56	0.19	mg/kg dry	13.9	<0.56	79.7	75-125			
Selenium	38.1	2.8	0.34	mg/kg dry	44.3	<2.8	85.2	75-125			
Silver	4.37	0.56	0.046	mg/kg dry	4.43	<0.56	93.2	75-125			

Matrix Spike Dup (B0G0116-MSD1)

Source: 2002496-01

Prepared: 07/01/20 Analyzed: 07/02/20

Arsenic	38.9	1.1	0.72	mg/kg dry	44.5	3.51	79.5	75-125	7.40	20	
Barium	123	1.1	0.052	mg/kg dry	44.5	80.6	94.2	75-125	9.37	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G0116 - EPA 3050B (M)											
Matrix Spike Dup (B0G0116-MSD1)											
	Source: 2002496-01					Prepared: 07/01/20		Analyzed: 07/02/20			
Cadmium	37.8	0.056	0.012	mg/kg dry	44.5	0.242	84.3	75-125	6.77	20	
Chromium	46.9	0.56	0.022	mg/kg dry	44.5	10.3	82.2	75-125	8.33	20	
Lead	158	0.84	0.11	mg/kg dry	44.5	110	108	75-125	17.2	20	
Mercury	10.7	0.56	0.19	mg/kg dry	14.0	<0.56	73.8	75-125	6.95	20	M2
Selenium	35.3	2.8	0.34	mg/kg dry	44.5	<2.8	78.4	75-125	7.64	20	
Silver	4.18	0.56	0.046	mg/kg dry	4.45	<0.56	88.4	75-125	4.40	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0606 - EPA 3545A ASE Extraction

Blank (B0G0606-BLK1)

Prepared: 07/06/20 Analyzed: 07/07/20

2-Chloronaphthalene	< 0.33	0.33	0.036	mg/kg wet							
2-Methylnaphthalene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthylene	< 0.33	0.33	0.037	mg/kg wet							
Anthracene	< 0.33	0.33	0.042	mg/kg wet							
Benzo(a)anthracene	< 0.33	0.33	0.059	mg/kg wet							
Benzo(a)pyrene	< 0.33	0.33	0.036	mg/kg wet							
Benzo(b)fluoranthene	< 0.33	0.33	0.046	mg/kg wet							
Benzo(g,h,i)perylene	< 0.33	0.33	0.064	mg/kg wet							
Benzo(k)fluoranthene	< 0.33	0.33	0.037	mg/kg wet							
Chrysene	< 0.33	0.33	0.054	mg/kg wet							
Dibenz(a,h)anthracene	< 0.33	0.33	0.043	mg/kg wet							
Fluoranthene	< 0.33	0.33	0.054	mg/kg wet							
Fluorene	< 0.33	0.33	0.044	mg/kg wet							
Indeno (1,2,3-cd) pyrene	< 0.33	0.33	0.044	mg/kg wet							
Naphthalene	< 0.33	0.33	0.034	mg/kg wet							
Phenanthrene	< 0.33	0.33	0.045	mg/kg wet							
Pyrene	< 0.33	0.33	0.057	mg/kg wet							
<i>Surrogate: 2-Fluorobiphenyl</i>	4.63			mg/kg wet	6.67		69.4	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	4.92			mg/kg wet	6.67		73.8	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	5.78			mg/kg wet	6.67		86.8	36.6-110			

LCS (B0G0606-BS1)

Prepared: 07/06/20 Analyzed: 07/07/20

Acenaphthylene	2.53	0.33	0.037	mg/kg wet	3.33	<0.33	75.8	58.2-95.8			
Anthracene	2.70	0.33	0.042	mg/kg wet	3.33	<0.33	80.9	64-98.3			
Benzo(a)anthracene	2.72	0.33	0.059	mg/kg wet	3.33	<0.33	81.7	65-99.4			
Benzo(a)pyrene	2.58	0.33	0.036	mg/kg wet	3.33	<0.33	77.3	63.7-102			
Benzo(b)fluoranthene	2.62	0.33	0.046	mg/kg wet	3.33	<0.33	78.6	62-99.1			
Benzo(g,h,i)perylene	2.37	0.33	0.064	mg/kg wet	3.33	<0.33	71.0	57.3-109			
Benzo(k)fluoranthene	2.63	0.33	0.037	mg/kg wet	3.33	<0.33	78.9	62.6-101			
Chrysene	2.72	0.33	0.054	mg/kg wet	3.33	<0.33	81.6	67.5-104			
Dibenz(a,h)anthracene	2.54	0.33	0.043	mg/kg wet	3.33	<0.33	76.3	59.8-106			
Fluoranthene	2.70	0.33	0.054	mg/kg wet	3.33	<0.33	81.1	61.8-99			
Fluorene	2.59	0.33	0.044	mg/kg wet	3.33	<0.33	77.6	62.2-99			
Indeno (1,2,3-cd) pyrene	2.47	0.33	0.044	mg/kg wet	3.33	<0.33	74.0	57-110			
Naphthalene	2.37	0.33	0.034	mg/kg wet	3.33	<0.33	71.0	55.5-92.3			
Phenanthrene	2.64	0.33	0.045	mg/kg wet	3.33	<0.33	79.3	63.8-99.9			
<i>Surrogate: 2-Fluorobiphenyl</i>	4.55			mg/kg wet	6.67		68.3	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	4.76			mg/kg wet	6.67		71.5	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	5.64			mg/kg wet	6.67		84.6	36.6-110			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0606 - EPA 3545A ASE Extraction

Matrix Spike (B0G0606-MS1) **Source: 2002549-01** Prepared: 07/06/20 Analyzed: 07/07/20

Acenaphthylene	2.51	0.35	0.039	mg/kg dry	3.51	<0.35	71.4	37.7-105			
Anthracene	3.05	0.35	0.044	mg/kg dry	3.51	<0.35	87.1	43.2-110			
Benzo(a)anthracene	3.09	0.35	0.062	mg/kg dry	3.51	<0.35	88.2	33.3-117			
Benzo(a)pyrene	2.93	0.35	0.038	mg/kg dry	3.51	<0.35	83.6	30-120			
Benzo(b)fluoranthene	2.90	0.35	0.048	mg/kg dry	3.51	<0.35	82.5	30-123			
Benzo(g,h,i)perylene	2.64	0.35	0.067	mg/kg dry	3.51	<0.35	75.2	30-122			
Benzo(k)fluoranthene	2.97	0.35	0.039	mg/kg dry	3.51	<0.35	84.7	35.2-116			
Chrysene	3.09	0.35	0.057	mg/kg dry	3.51	<0.35	88.2	38.4-122			
Dibenz(a,h)anthracene	2.83	0.35	0.045	mg/kg dry	3.51	<0.35	80.7	30-115			
Fluoranthene	3.19	0.35	0.057	mg/kg dry	3.51	<0.35	90.9	30-133			
Fluorene	2.72	0.35	0.046	mg/kg dry	3.51	<0.35	77.4	41.4-109			
Indeno (1,2,3-cd) pyrene	2.76	0.35	0.046	mg/kg dry	3.51	<0.35	78.7	30-119			
Naphthalene	2.28	0.35	0.036	mg/kg dry	3.51	<0.35	64.9	32-104			
Phenanthrene	2.98	0.35	0.047	mg/kg dry	3.51	<0.35	84.8	30-128			
<i>Surrogate: 2-Fluorobiphenyl</i>	4.31			mg/kg dry	7.02		61.5	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	4.63			mg/kg dry	7.02		66.0	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	6.82			mg/kg dry	7.02		97.1	36.6-110			

Matrix Spike Dup (B0G0606-MSD1) **Source: 2002549-01** Prepared: 07/06/20 Analyzed: 07/07/20

Acenaphthylene	2.62	0.35	0.039	mg/kg dry	3.51	<0.35	74.8	37.7-105	4.56	25.7	
Anthracene	2.89	0.35	0.044	mg/kg dry	3.51	<0.35	82.4	43.2-110	5.53	24.6	
Benzo(a)anthracene	2.98	0.35	0.062	mg/kg dry	3.51	<0.35	85.1	33.3-117	3.56	24.4	
Benzo(a)pyrene	2.82	0.35	0.038	mg/kg dry	3.51	<0.35	80.4	30-120	3.91	24.1	
Benzo(b)fluoranthene	2.83	0.35	0.048	mg/kg dry	3.51	<0.35	80.6	30-123	2.39	25.7	
Benzo(g,h,i)perylene	2.49	0.35	0.067	mg/kg dry	3.51	<0.35	71.1	30-122	5.63	26.4	
Benzo(k)fluoranthene	2.85	0.35	0.039	mg/kg dry	3.51	<0.35	81.3	35.2-116	4.09	24.8	
Chrysene	2.98	0.35	0.057	mg/kg dry	3.51	<0.35	84.8	38.4-122	3.88	25.7	
Dibenz(a,h)anthracene	2.66	0.35	0.045	mg/kg dry	3.51	<0.35	75.9	30-115	6.06	25.4	
Fluoranthene	3.03	0.35	0.057	mg/kg dry	3.51	<0.35	86.5	30-133	4.96	28	
Fluorene	2.77	0.35	0.046	mg/kg dry	3.51	<0.35	78.9	41.4-109	1.87	25	
Indeno (1,2,3-cd) pyrene	2.63	0.35	0.046	mg/kg dry	3.51	<0.35	74.8	30-119	5.06	24.5	
Naphthalene	2.40	0.35	0.036	mg/kg dry	3.51	<0.35	68.3	32-104	5.06	33.3	
Phenanthrene	2.82	0.35	0.047	mg/kg dry	3.51	<0.35	80.5	30-128	5.25	29.9	
<i>Surrogate: 2-Fluorobiphenyl</i>	4.73			mg/kg dry	7.02		67.4	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	4.97			mg/kg dry	7.02		70.8	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	6.88			mg/kg dry	7.02		98.1	36.6-110			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0719 - EPA 3510C (Sep Funnel)

Blank (B0G0719-BLK1)

Prepared: 07/07/20 Analyzed: 07/08/20

2-Chloronaphthalene	< 10	10	0.32	ug/L							
2-Methylnaphthalene	< 10	10	0.33	ug/L							
Acenaphthene	< 10	10	0.31	ug/L							
Acenaphthylene	< 10	10	0.43	ug/L							
Anthracene	< 10	10	0.43	ug/L							
Benzo(a)anthracene	< 10	10	0.44	ug/L							
Benzo(a)pyrene	< 10	10	0.50	ug/L							
Benzo(b)fluoranthene	< 10	10	0.63	ug/L							
Benzo(g,h,i)perylene	< 10	10	1.2	ug/L							
Benzo(k)fluoranthene	< 10	10	0.49	ug/L							
Chrysene	< 10	10	0.36	ug/L							
Dibenz(a,h)anthracene	< 10	10	1.2	ug/L							
Fluoranthene	< 10	10	0.75	ug/L							
Fluorene	< 10	10	0.56	ug/L							
Indeno (1,2,3-cd) pyrene	< 10	10	1.1	ug/L							
Naphthalene	< 10	10	0.31	ug/L							
Phenanthrene	< 10	10	0.41	ug/L							
Pyrene	< 10	10	0.84	ug/L							
Surrogate: 2-Fluorobiphenyl	72.4			ug/L	100		72.4	67.5-90.8			
Surrogate: Nitrobenzene-d5	74.5			ug/L	100		74.5	57.2-94.4			
Surrogate: Terphenyl-d14	52.6			ug/L	100		52.6	30-82.6			

LCS (B0G0719-BS1)

Prepared: 07/07/20 Analyzed: 07/08/20

Acenaphthylene	39.1	10	0.43	ug/L	50.0	<10	78.1	69.1-101			
Anthracene	41.6	10	0.43	ug/L	50.0	<10	83.1	70.7-97.4			
Benzo(a)anthracene	37.7	10	0.44	ug/L	50.0	<10	75.5	65.9-95.3			
Benzo(a)pyrene	28.1	10	0.50	ug/L	50.0	<10	56.2	52.3-96.8			
Benzo(b)fluoranthene	29.8	10	0.63	ug/L	50.0	<10	59.7	54.5-96.8			
Benzo(g,h,i)perylene	22.9	10	1.2	ug/L	50.0	<10	45.8	39.9-98.4			
Benzo(k)fluoranthene	30.8	10	0.49	ug/L	50.0	<10	61.6	53.6-94.7			
Chrysene	39.1	10	0.36	ug/L	50.0	<10	78.2	65.4-94			
Dibenz(a,h)anthracene	24.4	10	1.2	ug/L	50.0	<10	48.8	38.9-94.4			
Fluoranthene	40.8	10	0.75	ug/L	50.0	<10	81.6	71.8-97.5			
Fluorene	42.2	10	0.56	ug/L	50.0	<10	84.3	74.7-100			
Indeno (1,2,3-cd) pyrene	23.4	10	1.1	ug/L	50.0	<10	46.8	38.7-97.5			
Naphthalene	39.1	10	0.31	ug/L	50.0	<10	78.2	69.4-91.3			
Phenanthrene	42.6	10	0.41	ug/L	50.0	<10	85.2	73.2-97.3			
Surrogate: 2-Fluorobiphenyl	77.3			ug/L	100		77.3	67.5-90.8			
Surrogate: Nitrobenzene-d5	75.4			ug/L	100		75.4	57.2-94.4			
Surrogate: Terphenyl-d14	65.4			ug/L	100		65.4	30-82.6			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G0719 - EPA 3510C (Sep Funnel)											
LCS Dup (B0G0719-BSD1)											
							Prepared: 07/07/20	Analyzed: 07/08/20			Q9, QM-10
Acenaphthylene	39.4	10	0.43	ug/L	50.0	<10	78.7	69.1-101	0.785	20	
Anthracene	41.0	10	0.43	ug/L	50.0	<10	82.0	70.7-97.4	1.35	20	
Benzo(a)anthracene	38.5	10	0.44	ug/L	50.0	<10	77.0	65.9-95.3	2.03	20	
Benzo(a)pyrene	28.2	10	0.50	ug/L	50.0	<10	56.5	52.3-96.8	0.440	20	
Benzo(b)fluoranthene	29.6	10	0.63	ug/L	50.0	<10	59.1	54.5-96.8	0.967	20	
Benzo(g,h,i)perylene	23.2	10	1.2	ug/L	50.0	<10	46.5	39.9-98.4	1.42	20	
Benzo(k)fluoranthene	30.4	10	0.49	ug/L	50.0	<10	60.8	53.6-94.7	1.32	20	
Chrysene	39.1	10	0.36	ug/L	50.0	<10	78.2	65.4-94	0.0292	20	
Dibenz(a,h)anthracene	24.3	10	1.2	ug/L	50.0	<10	48.6	38.9-94.4	0.466	20	
Fluoranthene	41.4	10	0.75	ug/L	50.0	<10	82.9	71.8-97.5	1.54	20	
Fluorene	43.0	10	0.56	ug/L	50.0	<10	86.1	74.7-100	2.09	20	
Indeno (1,2,3-cd) pyrene	23.4	10	1.1	ug/L	50.0	<10	46.7	38.7-97.5	0.145	20	
Naphthalene	39.4	10	0.31	ug/L	50.0	<10	78.8	69.4-91.3	0.655	20	
Phenanthrene	41.9	10	0.41	ug/L	50.0	<10	83.7	73.2-97.3	1.68	20	
Surrogate: 2-Fluorobiphenyl	75.7			ug/L	100		75.7	67.5-90.8			
Surrogate: Nitrobenzene-d5	75.4			ug/L	100		75.4	57.2-94.4			
Surrogate: Terphenyl-d14	67.1			ug/L	100		67.1	30-82.6			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G0810 - General Preparation											
Duplicate (B0G0810-DUP1)		Source: 2002549-07				Prepared & Analyzed: 07/08/20					
% Solids	95.0			%		95.0			0.00	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

Blank (B0G0210-BLK1)

Prepared & Analyzed: 07/02/20

1,1,1,2-Tetrachloroethane	< 1.0	1.0	0.13	ug/L							
1,1,1-Trichloroethane	< 1.0	1.0	0.060	ug/L							
1,1,2,2-Tetrachloroethane	< 1.0	1.0	0.053	ug/L							
1,1,2-Trichloroethane	< 1.0	1.0	0.11	ug/L							
1,1,2-Trichlorotrifluoroethane	< 1.0	1.0	0.094	ug/L							
1,1-Dichloroethane	< 1.0	1.0	0.066	ug/L							
1,1-Dichloroethene	< 1.0	1.0	0.22	ug/L							
1,1-Dichloropropene	< 1.0	1.0	0.096	ug/L							
1,2,3-Trichlorobenzene	< 5.0	5.0	0.53	ug/L							
1,2,3-Trichloropropane	< 2.5	2.5	0.053	ug/L							
1,2,4-Trichlorobenzene	< 5.0	5.0	0.63	ug/L							
1,2,4-Trimethylbenzene	< 1.0	1.0	0.15	ug/L							
1,2-Dibromo-3-chloropropane	< 5.0	5.0	0.24	ug/L							
1,2-Dibromoethane (EDB)	< 2.5	2.5	0.18	ug/L							
1,2-Dichlorobenzene	< 1.0	1.0	0.33	ug/L							
1,2-Dichloroethane	< 1.0	1.0	0.13	ug/L							
1,2-Dichloropropane	< 1.0	1.0	0.067	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.12	ug/L							
1,3-Dichlorobenzene	< 1.0	1.0	0.43	ug/L							
1,3-Dichloropropane	< 1.0	1.0	0.10	ug/L							
1,4-Dichlorobenzene	< 1.0	1.0	0.49	ug/L							
2,2-Dichloropropane	< 5.0	5.0	0.089	ug/L							
2-Butanone	< 20	20	2.1	ug/L							
2-Chlorotoluene	< 1.0	1.0	0.18	ug/L							
4-Chlorotoluene	< 1.0	1.0	0.32	ug/L							
Acetone	< 20	20	5.0	ug/L							
Allyl chloride	< 5.0	5.0	0.19	ug/L							
Benzene	< 1.0	1.0	0.059	ug/L							
Bromobenzene	< 1.0	1.0	0.22	ug/L							
Bromochloromethane	< 1.0	1.0	0.23	ug/L							
Bromodichloromethane	< 1.0	1.0	0.081	ug/L							
Bromoform	< 5.0	5.0	0.11	ug/L							
Bromomethane	< 5.0	5.0	0.11	ug/L							
Carbon tetrachloride	< 1.0	1.0	0.054	ug/L							
Chlorobenzene	< 1.0	1.0	0.24	ug/L							
Chloroethane	< 2.5	2.5	0.075	ug/L							
Chloroform	< 1.0	1.0	0.36	ug/L							
Chloromethane	< 2.5	2.5	0.097	ug/L							
cis-1,2-Dichloroethene	< 1.0	1.0	0.22	ug/L							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

Blank (B0G0210-BLK1)

Prepared & Analyzed: 07/02/20

cis-1,3-Dichloropropene	< 1.0	1.0	0.23	ug/L							
Dibromochloromethane	< 2.5	2.5	0.10	ug/L							
Dibromomethane	< 2.5	2.5	0.19	ug/L							
Dichlorodifluoromethane	< 5.0	5.0	0.062	ug/L							
Dichlorofluoromethane	< 1.0	1.0	0.046	ug/L							
Ethyl ether	< 5.0	5.0	0.039	ug/L							
Ethylbenzene	< 1.0	1.0	0.14	ug/L							
Hexachlorobutadiene	< 10	10	0.27	ug/L							
Isopropylbenzene	< 1.0	1.0	0.57	ug/L							
m,p-Xylene	< 2.0	2.0	0.29	ug/L							
Methyl isobutyl ketone	< 5.0	5.0	0.063	ug/L							
Methyl tert-butyl ether	< 1.0	1.0	0.051	ug/L							
Methylene chloride	< 5.0	5.0	0.98	ug/L							
Naphthalene	< 5.0	5.0	0.34	ug/L							
n-Butylbenzene	< 2.5	2.5	0.36	ug/L							
n-Propylbenzene	< 1.0	1.0	0.18	ug/L							
o-Xylene	< 1.0	1.0	0.76	ug/L							
p-Isopropyltoluene	< 2.5	2.5	0.12	ug/L							
sec-Butylbenzene	< 1.0	1.0	0.11	ug/L							
Styrene	< 1.0	1.0	0.21	ug/L							
tert-Butylbenzene	< 1.0	1.0	0.063	ug/L							
Tetrachloroethene	< 1.0	1.0	0.10	ug/L							
Tetrahydrofuran	< 20	20	1.5	ug/L							
Toluene	< 1.0	1.0	0.10	ug/L							
trans-1,2-Dichloroethene	< 1.0	1.0	0.26	ug/L							
trans-1,3-Dichloropropene	< 1.0	1.0	0.22	ug/L							
Trichloroethene	< 1.0	1.0	0.54	ug/L							
Trichlorofluoromethane	< 1.0	1.0	0.073	ug/L							
Vinyl chloride	< 1.0	1.0	0.064	ug/L							
Surrogate: 4-Bromofluorobenzene	51.6			ug/L	52.4		98.4	80-120			
Surrogate: Dibromofluoromethane	49.5			ug/L	52.4		94.4	80-120			
Surrogate: Toluene-d8	48.1			ug/L	52.4		91.7	80-120			

LCS (B0G0210-BS1)

Prepared & Analyzed: 07/02/20

1,1,1,2-Tetrachloroethane	47.8	1.0	0.13	ug/L	47.0	<1.0	102	80-120			
1,1,1-Trichloroethane	47.4	1.0	0.060	ug/L	47.0	<1.0	101	80-120			
1,1,2,2-Tetrachloroethane	50.1	1.0	0.053	ug/L	47.0	<1.0	107	77.6-121			
1,1,2-Trichloroethane	48.8	1.0	0.11	ug/L	47.0	<1.0	104	80-120			
1,1,2-Trichlorotrifluoroethane	48.3	1.0	0.094	ug/L	47.0	<1.0	103	80-120			
1,1-Dichloroethane	47.8	1.0	0.066	ug/L	47.0	<1.0	102	80-120			

Barr Engineering Co.
 4300 MarketPointe Drive, Suite 200
 Minneapolis, MN 55435

Project: 23271806
 Project Number: 23271806
 Project Manager: Ms. Andrea Nord

Work Order #: 2002496
 Date Reported: 07/24/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

LCS (B0G0210-BS1)

Prepared & Analyzed: 07/02/20

1,1-Dichloroethene	49.4	1.0	0.22	ug/L	47.0	<1.0	105	80-120			
1,1-Dichloropropene	47.9	1.0	0.096	ug/L	47.0	<1.0	102	80-120			
1,2,3-Trichlorobenzene	51.2	5.0	0.53	ug/L	47.0	<5.0	109	70-130			
1,2,3-Trichloropropane	47.7	2.5	0.053	ug/L	47.0	<2.5	101	76.7-120			
1,2,4-Trichlorobenzene	51.3	5.0	0.63	ug/L	47.0	<5.0	109	70-130			
1,2,4-Trimethylbenzene	49.5	1.0	0.15	ug/L	47.0	<1.0	105	80-120			
1,2-Dibromo-3-chloropropane	50.5	5.0	0.24	ug/L	47.0	<5.0	107	75-125			
1,2-Dibromoethane (EDB)	47.8	2.5	0.18	ug/L	47.0	<2.5	102	80-120			
1,2-Dichlorobenzene	49.4	1.0	0.33	ug/L	47.0	<1.0	105	75-125			
1,2-Dichloroethane	48.1	1.0	0.13	ug/L	47.0	<1.0	102	78.2-120			
1,2-Dichloropropane	49.7	1.0	0.067	ug/L	47.0	<1.0	106	80-120			
1,3,5-Trimethylbenzene	48.9	1.0	0.12	ug/L	47.0	<1.0	104	80-120			
1,3-Dichlorobenzene	47.8	1.0	0.43	ug/L	47.0	<1.0	102	75-125			
1,3-Dichloropropane	47.6	1.0	0.10	ug/L	47.0	<1.0	101	80-120			
1,4-Dichlorobenzene	47.1	1.0	0.49	ug/L	47.0	<1.0	100	75-125			
2,2-Dichloropropane	47.2	5.0	0.089	ug/L	47.0	<5.0	100	70-136			
2-Butanone	49.7	20	2.1	ug/L	47.0	<20	106	75-125			
2-Chlorotoluene	48.9	1.0	0.18	ug/L	47.0	<1.0	104	80-120			
4-Chlorotoluene	47.9	1.0	0.32	ug/L	47.0	<1.0	102	80-120			
Acetone	52.9	20	5.0	ug/L	47.0	<20	113	75-125			
Allyl chloride	48.3	5.0	0.19	ug/L	47.0	<5.0	103	77-121			
Benzene	49.2	1.0	0.059	ug/L	47.0	<1.0	105	80-120			
Bromobenzene	48.7	1.0	0.22	ug/L	47.0	<1.0	104	80-120			
Bromochloromethane	47.5	1.0	0.23	ug/L	47.0	<1.0	101	80-120			
Bromodichloromethane	49.0	1.0	0.081	ug/L	47.0	<1.0	104	80-120			
Bromoform	50.2	5.0	0.11	ug/L	47.0	<5.0	107	79.7-120			
Bromomethane	45.9	5.0	0.11	ug/L	47.0	<5.0	97.6	75-129			
Carbon tetrachloride	48.2	1.0	0.054	ug/L	47.0	<1.0	103	80-120			
Chlorobenzene	47.8	1.0	0.24	ug/L	47.0	<1.0	102	80-120			
Chloroethane	46.8	2.5	0.075	ug/L	47.0	<2.5	99.7	75-125			
Chloroform	47.1	1.0	0.36	ug/L	47.0	<1.0	100	80-120			
Chloromethane	50.1	2.5	0.097	ug/L	47.0	<2.5	107	75-130			
cis-1,2-Dichloroethene	47.5	1.0	0.22	ug/L	47.0	<1.0	101	80-120			
cis-1,3-Dichloropropene	49.0	1.0	0.23	ug/L	47.0	<1.0	104	80-120			
Dibromochloromethane	48.3	2.5	0.10	ug/L	47.0	<2.5	103	80-120			
Dibromomethane	48.3	2.5	0.19	ug/L	47.0	<2.5	103	80-120			
Dichlorodifluoromethane	51.7	5.0	0.062	ug/L	47.0	<5.0	110	70-128			
Dichlorofluoromethane	46.7	1.0	0.046	ug/L	47.0	<1.0	99.4	75-125			
Ethyl ether	47.7	5.0	0.039	ug/L	47.0	<5.0	101	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

LCS (B0G0210-BS1)

Prepared & Analyzed: 07/02/20

Ethylbenzene	48.5	1.0	0.14	ug/L	47.0	<1.0	103	80-120			
Hexachlorobutadiene	50.2	10	0.27	ug/L	47.0	<10	107	70-130			
Isopropylbenzene	48.9	1.0	0.57	ug/L	47.0	<1.0	104	78.9-120			
m,p-Xylene	96.3	2.0	0.29	ug/L	94.0	<2.0	102	80-120			
Methyl isobutyl ketone	49.6	5.0	0.063	ug/L	47.0	<5.0	106	80-120			
Methyl tert-butyl ether	47.7	1.0	0.051	ug/L	47.0	<1.0	101	80-120			
Methylene chloride	47.1	5.0	0.98	ug/L	47.0	<5.0	100	79.2-120			
Naphthalene	52.3	5.0	0.34	ug/L	47.0	<5.0	111	70-126			
n-Butylbenzene	50.2	2.5	0.36	ug/L	47.0	<2.5	107	75-125			
n-Propylbenzene	49.3	1.0	0.18	ug/L	47.0	<1.0	105	80-120			
o-Xylene	49.4	1.0	0.76	ug/L	47.0	<1.0	105	80-120			
p-Isopropyltoluene	49.7	2.5	0.12	ug/L	47.0	<2.5	106	75-125			
sec-Butylbenzene	49.0	1.0	0.11	ug/L	47.0	<1.0	104	75-125			
Styrene	48.7	1.0	0.21	ug/L	47.0	<1.0	104	80-120			
tert-Butylbenzene	50.3	1.0	0.063	ug/L	47.0	<1.0	107	80-120			
Tetrachloroethene	48.8	1.0	0.10	ug/L	47.0	<1.0	104	80-120			
Tetrahydrofuran	46.7	20	1.5	ug/L	47.0	<20	99.4	75-125			
Toluene	48.9	1.0	0.10	ug/L	47.0	<1.0	104	80-120			
trans-1,2-Dichloroethene	47.7	1.0	0.26	ug/L	47.0	<1.0	102	80-120			
trans-1,3-Dichloropropene	48.0	1.0	0.22	ug/L	47.0	<1.0	102	80-120			
Trichloroethene	47.0	1.0	0.54	ug/L	47.0	<1.0	100	80-120			
Trichlorofluoromethane	47.7	1.0	0.073	ug/L	47.0	<1.0	102	75-128			
Vinyl chloride	49.9	1.0	0.064	ug/L	47.0	<1.0	106	75-130			
Surrogate: 4-Bromofluorobenzene	50.8			ug/L	52.4		96.9	80-120			
Surrogate: Dibromofluoromethane	47.8			ug/L	52.4		91.3	80-120			
Surrogate: Toluene-d8	50.4			ug/L	52.4		96.1	80-120			

Matrix Spike (B0G0210-MS1)

Source: 2002487-01

Prepared & Analyzed: 07/02/20

1,1,1,2-Tetrachloroethane	51.9	1.0	0.13	ug/L	47.0	<1.0	111	80-120			
1,1,1-Trichloroethane	50.9	1.0	0.060	ug/L	47.0	<1.0	108	80-120			
1,1,2,2-Tetrachloroethane	52.1	1.0	0.053	ug/L	47.0	<1.0	111	75-125			
1,1,2-Trichloroethane	49.5	1.0	0.11	ug/L	47.0	<1.0	105	80-120			
1,1,2-Trichlorotrifluoroethane	54.7	1.0	0.094	ug/L	47.0	<1.0	116	75.8-120			
1,1-Dichloroethane	50.4	1.0	0.066	ug/L	47.0	<1.0	107	80-120			
1,1-Dichloroethene	53.0	1.0	0.22	ug/L	47.0	<1.0	113	80-120			
1,1-Dichloropropene	50.7	1.0	0.096	ug/L	47.0	<1.0	108	80-120			
1,2,3-Trichlorobenzene	47.2	5.0	0.53	ug/L	47.0	<5.0	101	70-130			
1,2,3-Trichloropropane	49.3	2.5	0.053	ug/L	47.0	<2.5	105	75-122			
1,2,4-Trichlorobenzene	47.8	5.0	0.63	ug/L	47.0	<5.0	102	70-130			
1,2,4-Trimethylbenzene	48.7	1.0	0.15	ug/L	47.0	<1.0	104	80-120			

Barr Engineering Co.
 4300 MarketPointe Drive, Suite 200
 Minneapolis, MN 55435

Project: 23271806
 Project Number: 23271806
 Project Manager: Ms. Andrea Nord

Work Order #: 2002496
 Date Reported: 07/24/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

Matrix Spike (B0G0210-MS1)

Source: 2002487-01

Prepared & Analyzed: 07/02/20

1,2-Dibromo-3-chloropropane	55.4	5.0	0.24	ug/L	47.0	<5.0	118	74.5-122			
1,2-Dibromoethane (EDB)	51.1	2.5	0.18	ug/L	47.0	<2.5	109	80-120			
1,2-Dichlorobenzene	49.4	1.0	0.33	ug/L	47.0	<1.0	105	75-125			
1,2-Dichloroethane	50.4	1.0	0.13	ug/L	47.0	<1.0	107	78.6-122			
1,2-Dichloropropane	50.6	1.0	0.067	ug/L	47.0	<1.0	108	80-120			
1,3,5-Trimethylbenzene	46.4	1.0	0.12	ug/L	47.0	<1.0	98.6	80-120			
1,3-Dichlorobenzene	48.0	1.0	0.43	ug/L	47.0	<1.0	102	75-125			
1,3-Dichloropropane	50.3	1.0	0.10	ug/L	47.0	<1.0	107	80-120			
1,4-Dichlorobenzene	47.4	1.0	0.49	ug/L	47.0	<1.0	101	75-125			
2,2-Dichloropropane	45.9	5.0	0.089	ug/L	47.0	<5.0	97.7	65.9-140			
2-Butanone	44.2	20	2.1	ug/L	47.0	<20	94.1	75-125			
2-Chlorotoluene	49.2	1.0	0.18	ug/L	47.0	<1.0	105	75-124			
4-Chlorotoluene	47.6	1.0	0.32	ug/L	47.0	<1.0	101	79.5-120			
Acetone	40.9	20	5.0	ug/L	47.0	<20	87.1	75-125			
Allyl chloride	50.0	5.0	0.19	ug/L	47.0	<5.0	106	75-121			
Benzene	51.6	1.0	0.059	ug/L	47.0	<1.0	110	80-120			
Bromobenzene	50.0	1.0	0.22	ug/L	47.0	<1.0	106	78.7-120			
Bromochloromethane	49.8	1.0	0.23	ug/L	47.0	<1.0	106	75-120			
Bromodichloromethane	50.2	1.0	0.081	ug/L	47.0	<1.0	107	80-120			
Bromoform	52.9	5.0	0.11	ug/L	47.0	<5.0	113	78-122			
Bromomethane	48.2	5.0	0.11	ug/L	47.0	<5.0	103	75-130			
Carbon tetrachloride	51.8	1.0	0.054	ug/L	47.0	<1.0	110	79.2-120			
Chlorobenzene	50.5	1.0	0.24	ug/L	47.0	<1.0	107	80-120			
Chloroethane	49.3	2.5	0.075	ug/L	47.0	<2.5	105	75-128			
Chloroform	50.3	1.0	0.36	ug/L	47.0	<1.0	107	80-120			
Chloromethane	50.1	2.5	0.097	ug/L	47.0	<2.5	107	71.8-130			
cis-1,2-Dichloroethene	50.3	1.0	0.22	ug/L	47.0	<1.0	107	80-120			
cis-1,3-Dichloropropene	48.9	1.0	0.23	ug/L	47.0	<1.0	104	80-120			
Dibromochloromethane	51.0	2.5	0.10	ug/L	47.0	<2.5	108	80-120			
Dibromomethane	50.0	2.5	0.19	ug/L	47.0	<2.5	106	80-120			
Dichlorodifluoromethane	59.0	5.0	0.062	ug/L	47.0	<5.0	126	70-125			M1
Dichlorofluoromethane	50.1	1.0	0.046	ug/L	47.0	<1.0	107	75-130			
Ethyl ether	49.5	5.0	0.039	ug/L	47.0	<5.0	105	80-120			
Ethylbenzene	50.5	1.0	0.14	ug/L	47.0	<1.0	107	80-120			
Hexachlorobutadiene	30.5	10	0.27	ug/L	47.0	<10	65.0	70-130			M2
Isopropylbenzene	49.4	1.0	0.57	ug/L	47.0	<1.0	105	77.4-120			
m,p-Xylene	99.3	2.0	0.29	ug/L	94.0	<2.0	106	79.4-120			
Methyl isobutyl ketone	53.1	5.0	0.063	ug/L	47.0	<5.0	113	80-120			
Methyl tert-butyl ether	51.2	1.0	0.051	ug/L	47.0	<1.0	109	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

Matrix Spike (B0G0210-MS1)

Source: 2002487-01

Prepared & Analyzed: 07/02/20

Methylene chloride	48.7	5.0	0.98	ug/L	47.0	<5.0	104	78.4-120			
Naphthalene	50.8	5.0	0.34	ug/L	47.0	<5.0	108	70-125			
n-Butylbenzene	43.5	2.5	0.36	ug/L	47.0	<2.5	92.4	75-125			
n-Propylbenzene	47.4	1.0	0.18	ug/L	47.0	<1.0	101	77.4-120			
o-Xylene	51.8	1.0	0.76	ug/L	47.0	<1.0	110	80-120			
p-Isopropyltoluene	45.4	2.5	0.12	ug/L	47.0	<2.5	96.6	75-125			
sec-Butylbenzene	46.2	1.0	0.11	ug/L	47.0	<1.0	98.4	75-125			
Styrene	51.3	1.0	0.21	ug/L	47.0	<1.0	109	80-120			
tert-Butylbenzene	47.6	1.0	0.063	ug/L	47.0	<1.0	101	78.8-120			
Tetrachloroethene	49.7	1.0	0.10	ug/L	47.0	<1.0	106	80-120			
Tetrahydrofuran	49.5	20	1.5	ug/L	47.0	<20	105	75-125			
Toluene	50.4	1.0	0.10	ug/L	47.0	<1.0	107	80-120			
trans-1,2-Dichloroethene	50.2	1.0	0.26	ug/L	47.0	<1.0	107	80-120			
trans-1,3-Dichloropropene	48.6	1.0	0.22	ug/L	47.0	<1.0	103	80-120			
Trichloroethene	48.1	1.0	0.54	ug/L	47.0	<1.0	102	80-120			
Trichlorofluoromethane	51.7	1.0	0.073	ug/L	47.0	<1.0	110	72.9-130			
Vinyl chloride	50.6	1.0	0.064	ug/L	47.0	<1.0	108	75-130			
Surrogate: 4-Bromofluorobenzene	52.4			ug/L	52.4		100	80-120			
Surrogate: Dibromofluoromethane	50.2			ug/L	52.4		95.7	80-120			
Surrogate: Toluene-d8	51.2			ug/L	52.4		97.8	80-120			

Matrix Spike Dup (B0G0210-MSD1)

Source: 2002487-01

Prepared & Analyzed: 07/02/20

1,1,1,2-Tetrachloroethane	51.4	1.0	0.13	ug/L	47.0	<1.0	109	80-120	1.02	20	
1,1,1-Trichloroethane	51.2	1.0	0.060	ug/L	47.0	<1.0	109	80-120	0.668	20	
1,1,2,2-Tetrachloroethane	52.0	1.0	0.053	ug/L	47.0	<1.0	111	75-125	0.180	20	
1,1,2-Trichloroethane	49.4	1.0	0.11	ug/L	47.0	<1.0	105	80-120	0.125	20	
1,1,2-Trichlorotrifluoroethane	51.1	1.0	0.094	ug/L	47.0	<1.0	109	75.8-120	6.91	20	
1,1-Dichloroethane	51.0	1.0	0.066	ug/L	47.0	<1.0	108	80-120	1.05	20	
1,1-Dichloroethene	51.1	1.0	0.22	ug/L	47.0	<1.0	109	80-120	3.72	20	
1,1-Dichloropropene	50.4	1.0	0.096	ug/L	47.0	<1.0	107	80-120	0.613	20	
1,2,3-Trichlorobenzene	47.9	5.0	0.53	ug/L	47.0	<5.0	102	70-130	1.46	25	
1,2,3-Trichloropropane	49.7	2.5	0.053	ug/L	47.0	<2.5	106	75-122	0.744	20	
1,2,4-Trichlorobenzene	48.0	5.0	0.63	ug/L	47.0	<5.0	102	70-130	0.423	25	
1,2,4-Trimethylbenzene	48.9	1.0	0.15	ug/L	47.0	<1.0	104	80-120	0.427	20	
1,2-Dibromo-3-chloropropane	54.7	5.0	0.24	ug/L	47.0	<5.0	116	74.5-122	1.25	20	
1,2-Dibromoethane (EDB)	50.5	2.5	0.18	ug/L	47.0	<2.5	107	80-120	1.15	20	
1,2-Dichlorobenzene	49.5	1.0	0.33	ug/L	47.0	<1.0	105	75-125	0.168	20	
1,2-Dichloroethane	50.6	1.0	0.13	ug/L	47.0	<1.0	108	78.6-122	0.315	20	
1,2-Dichloropropane	51.5	1.0	0.067	ug/L	47.0	<1.0	109	80-120	1.79	20	
1,3,5-Trimethylbenzene	47.0	1.0	0.12	ug/L	47.0	<1.0	99.9	80-120	1.30	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0210 - EPA 5030C Water (Purge and Trap)

Matrix Spike Dup (B0G0210-MSD1)

Source: 2002487-01

Prepared & Analyzed: 07/02/20

1,3-Dichlorobenzene	48.1	1.0	0.43	ug/L	47.0	<1.0	102	75-125	0.190	20	
1,3-Dichloropropane	49.9	1.0	0.10	ug/L	47.0	<1.0	106	80-120	0.806	20	
1,4-Dichlorobenzene	46.1	1.0	0.49	ug/L	47.0	<1.0	98.2	75-125	2.70	20	
2,2-Dichloropropane	43.5	5.0	0.089	ug/L	47.0	<5.0	92.6	65.9-140	5.28	20	
2-Butanone	45.4	20	2.1	ug/L	47.0	<20	96.6	75-125	2.58	20	
2-Chlorotoluene	49.2	1.0	0.18	ug/L	47.0	<1.0	105	75-124	0.0217	20	
4-Chlorotoluene	48.2	1.0	0.32	ug/L	47.0	<1.0	102	79.5-120	1.17	20	
Acetone	42.8	20	5.0	ug/L	47.0	<20	91.1	75-125	4.45	25	
Allyl chloride	50.5	5.0	0.19	ug/L	47.0	<5.0	107	75-121	0.955	20	
Benzene	51.4	1.0	0.059	ug/L	47.0	<1.0	109	80-120	0.399	20	
Bromobenzene	49.5	1.0	0.22	ug/L	47.0	<1.0	105	78.7-120	1.02	20	
Bromochloromethane	50.6	1.0	0.23	ug/L	47.0	<1.0	108	75-120	1.78	20	
Bromodichloromethane	50.6	1.0	0.081	ug/L	47.0	<1.0	108	80-120	0.693	20	
Bromoform	51.5	5.0	0.11	ug/L	47.0	<5.0	110	78-122	2.63	20	
Bromomethane	49.5	5.0	0.11	ug/L	47.0	<5.0	105	75-130	2.60	21.9	
Carbon tetrachloride	51.3	1.0	0.054	ug/L	47.0	<1.0	109	79.2-120	1.03	20	
Chlorobenzene	50.6	1.0	0.24	ug/L	47.0	<1.0	108	80-120	0.291	20	
Chloroethane	50.7	2.5	0.075	ug/L	47.0	<2.5	108	75-128	2.80	20	
Chloroform	51.1	1.0	0.36	ug/L	47.0	<1.0	109	80-120	1.54	20	
Chloromethane	52.1	2.5	0.097	ug/L	47.0	<2.5	111	71.8-130	4.06	25	
cis-1,2-Dichloroethene	49.9	1.0	0.22	ug/L	47.0	<1.0	106	80-120	0.840	20	
cis-1,3-Dichloropropene	49.1	1.0	0.23	ug/L	47.0	<1.0	104	80-120	0.417	20	
Dibromochloromethane	50.8	2.5	0.10	ug/L	47.0	<2.5	108	80-120	0.361	20	
Dibromomethane	51.0	2.5	0.19	ug/L	47.0	<2.5	108	80-120	1.89	20	
Dichlorodifluoromethane	53.3	5.0	0.062	ug/L	47.0	<5.0	113	70-125	10.1	20	
Dichlorofluoromethane	49.4	1.0	0.046	ug/L	47.0	<1.0	105	75-130	1.52	20	
Ethyl ether	50.3	5.0	0.039	ug/L	47.0	<5.0	107	80-120	1.52	20	
Ethylbenzene	50.5	1.0	0.14	ug/L	47.0	<1.0	107	80-120	0.0731	20	
Hexachlorobutadiene	31.2	10	0.27	ug/L	47.0	<10	66.3	70-130	2.03	25	M2
Isopropylbenzene	49.3	1.0	0.57	ug/L	47.0	<1.0	105	77.4-120	0.119	20	
m,p-Xylene	99.0	2.0	0.29	ug/L	94.0	<2.0	105	79.4-120	0.286	20	
Methyl isobutyl ketone	53.0	5.0	0.063	ug/L	47.0	<5.0	113	80-120	0.0580	20	
Methyl tert-butyl ether	51.8	1.0	0.051	ug/L	47.0	<1.0	110	80-120	1.13	20	
Methylene chloride	49.6	5.0	0.98	ug/L	47.0	<5.0	106	78.4-120	1.77	20	
Naphthalene	51.0	5.0	0.34	ug/L	47.0	<5.0	109	70-125	0.468	22.9	
n-Butylbenzene	44.1	2.5	0.36	ug/L	47.0	<2.5	93.8	75-125	1.42	20	
n-Propylbenzene	48.0	1.0	0.18	ug/L	47.0	<1.0	102	77.4-120	1.18	20	
o-Xylene	51.5	1.0	0.76	ug/L	47.0	<1.0	110	80-120	0.660	20	
p-Isopropyltoluene	46.5	2.5	0.12	ug/L	47.0	<2.5	99.0	75-125	2.36	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G0210 - EPA 5030C Water (Purge and Trap)											
Matrix Spike Dup (B0G0210-MSD1)			Source: 2002487-01			Prepared & Analyzed: 07/02/20					
sec-Butylbenzene	46.3	1.0	0.11	ug/L	47.0	<1.0	98.4	75-125	0.0623	20	
Styrene	51.5	1.0	0.21	ug/L	47.0	<1.0	110	80-120	0.417	20	
tert-Butylbenzene	47.7	1.0	0.063	ug/L	47.0	<1.0	101	78.8-120	0.157	20	
Tetrachloroethene	48.5	1.0	0.10	ug/L	47.0	<1.0	103	80-120	2.49	20	
Tetrahydrofuran	50.5	20	1.5	ug/L	47.0	<20	108	75-125	2.12	20	
Toluene	50.0	1.0	0.10	ug/L	47.0	<1.0	106	80-120	0.813	20	
trans-1,2-Dichloroethene	50.5	1.0	0.26	ug/L	47.0	<1.0	107	80-120	0.688	20	
trans-1,3-Dichloropropene	48.9	1.0	0.22	ug/L	47.0	<1.0	104	80-120	0.629	20	
Trichloroethene	48.0	1.0	0.54	ug/L	47.0	<1.0	102	80-120	0.247	20	
Trichlorofluoromethane	50.3	1.0	0.073	ug/L	47.0	<1.0	107	72.9-130	2.74	20	
Vinyl chloride	52.2	1.0	0.064	ug/L	47.0	<1.0	111	75-130	3.23	20	
Surrogate: 4-Bromofluorobenzene	51.2			ug/L	52.4		97.6	80-120			
Surrogate: Dibromofluoromethane	49.0			ug/L	52.4		93.5	80-120			
Surrogate: Toluene-d8	50.4			ug/L	52.4		96.3	80-120			

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)											
Blank (B0G0620-BLK1)			Prepared & Analyzed: 07/03/20								
1,1,1,2-Tetrachloroethane	< 0.20	0.20	0.011	mg/kg wet							
1,1,1-Trichloroethane	< 0.20	0.20	0.019	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.20	0.20	0.014	mg/kg wet							
1,1,2-Trichloroethane	< 0.20	0.20	0.016	mg/kg wet							
1,1,2-Trichlorotrifluoroethane	< 0.20	0.20	0.018	mg/kg wet							
1,1-Dichloroethane	< 0.20	0.20	0.0092	mg/kg wet							
1,1-Dichloroethene	< 0.20	0.20	0.0053	mg/kg wet							
1,1-Dichloropropene	< 0.20	0.20	0.013	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.50	0.50	0.031	mg/kg wet							
1,2,3-Trichloropropane	< 0.20	0.20	0.016	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.50	0.50	0.032	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.20	0.20	0.011	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.023	mg/kg wet							
1,2-Dibromoethane (EDB)	< 0.20	0.20	0.013	mg/kg wet							
1,2-Dichlorobenzene	< 0.20	0.20	0.0081	mg/kg wet							
1,2-Dichloroethane	< 0.20	0.20	0.011	mg/kg wet							
1,2-Dichloropropane	< 0.20	0.20	0.0071	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.20	0.20	0.012	mg/kg wet							
1,3-Dichlorobenzene	< 0.20	0.20	0.013	mg/kg wet							
1,3-Dichloropropane	< 0.20	0.20	0.0090	mg/kg wet							
1,4-Dichlorobenzene	< 0.20	0.20	0.0098	mg/kg wet							
2,2-Dichloropropane	< 0.20	0.20	0.027	mg/kg wet							
2-Butanone	< 1.0	1.0	0.039	mg/kg wet							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

Blank (B0G0620-BLK1)

Prepared & Analyzed: 07/03/20

2-Chlorotoluene	< 0.20	0.20	0.0090	mg/kg wet							
4-Chlorotoluene	< 0.20	0.20	0.015	mg/kg wet							
Acetone	< 1.0	1.0	0.054	mg/kg wet							
Allyl chloride	< 0.20	0.20	0.010	mg/kg wet							
Benzene	< 0.20	0.20	0.0088	mg/kg wet							
Bromobenzene	< 0.20	0.20	0.017	mg/kg wet							
Bromochloromethane	< 0.20	0.20	0.014	mg/kg wet							
Bromodichloromethane	< 0.20	0.20	0.0086	mg/kg wet							
Bromoform	< 0.20	0.20	0.014	mg/kg wet							
Bromomethane	< 0.20	0.20	0.048	mg/kg wet							
Carbon tetrachloride	< 0.20	0.20	0.016	mg/kg wet							
Chlorobenzene	< 0.20	0.20	0.0059	mg/kg wet							
Chloroethane	< 0.20	0.20	0.019	mg/kg wet							
Chloroform	< 0.20	0.20	0.014	mg/kg wet							
Chloromethane	< 0.20	0.20	0.013	mg/kg wet							
cis-1,2-Dichloroethene	< 0.20	0.20	0.0098	mg/kg wet							
cis-1,3-Dichloropropene	< 0.20	0.20	0.016	mg/kg wet							
Dibromochloromethane	< 0.20	0.20	0.011	mg/kg wet							
Dibromomethane	< 0.20	0.20	0.019	mg/kg wet							
Dichlorodifluoromethane	< 0.20	0.20	0.026	mg/kg wet							
Dichlorofluoromethane	< 0.20	0.20	0.016	mg/kg wet							
Ethyl ether	< 0.20	0.20	0.012	mg/kg wet							
Ethylbenzene	< 0.20	0.20	0.0089	mg/kg wet							
Hexachlorobutadiene	< 0.50	0.50	0.031	mg/kg wet							
Isopropylbenzene	< 0.20	0.20	0.014	mg/kg wet							
m,p-Xylene	< 0.40	0.40	0.024	mg/kg wet							
Methyl isobutyl ketone	< 0.20	0.20	0.026	mg/kg wet							
Methyl tert-butyl ether	< 0.20	0.20	0.014	mg/kg wet							
Methylene chloride	< 0.50	0.50	0.024	mg/kg wet							
Naphthalene	< 0.50	0.50	0.030	mg/kg wet							
n-Butylbenzene	< 0.20	0.20	0.011	mg/kg wet							
n-Propylbenzene	< 0.20	0.20	0.018	mg/kg wet							
o-Xylene	< 0.20	0.20	0.0074	mg/kg wet							
p-Isopropyltoluene	< 0.20	0.20	0.0086	mg/kg wet							
sec-Butylbenzene	< 0.20	0.20	0.011	mg/kg wet							
Styrene	< 0.20	0.20	0.0053	mg/kg wet							
tert-Butylbenzene	< 0.20	0.20	0.0061	mg/kg wet							
Tetrachloroethene	< 0.20	0.20	0.010	mg/kg wet							
Tetrahydrofuran	< 1.0	1.0	0.096	mg/kg wet							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

Blank (B0G0620-BLK1)

Prepared & Analyzed: 07/03/20

Toluene	< 0.20	0.20	0.0085	mg/kg wet							
trans-1,2-Dichloroethene	< 0.20	0.20	0.012	mg/kg wet							
trans-1,3-Dichloropropene	< 0.20	0.20	0.010	mg/kg wet							
Trichloroethene	< 0.20	0.20	0.0034	mg/kg wet							
Trichlorofluoromethane	< 0.20	0.20	0.016	mg/kg wet							
Vinyl chloride	< 0.20	0.20	0.024	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	51.2			ug/L	52.4		97.7	80-120			
Surrogate: Dibromofluoromethane	49.3			ug/L	52.4		94.1	80-120			
Surrogate: Toluene-d8	50.6			ug/L	52.4		96.5	80-120			

LCS (B0G0620-BS1)

Prepared & Analyzed: 07/03/20

1,1,1,2-Tetrachloroethane	47.4			ug/L	47.0		101	80-120			
1,1,1-Trichloroethane	48.4			ug/L	47.0		103	80-120			
1,1,2,2-Tetrachloroethane	53.4			ug/L	47.0		114	75-125			
1,1,2-Trichloroethane	47.2			ug/L	47.0		100	80-120			
1,1,2-Trichlorotrifluoroethane	49.6			ug/L	47.0		106	80-120			
1,1-Dichloroethane	49.0			ug/L	47.0		104	80-120			
1,1-Dichloroethene	47.7			ug/L	47.0		102	80-120			
1,1-Dichloropropene	48.1			ug/L	47.0		102	80-120			
1,2,3-Trichlorobenzene	37.5			ug/L	47.0		79.8	70-130			
1,2,3-Trichloropropane	52.0			ug/L	47.0		111	75-125			
1,2,4-Trichlorobenzene	38.7			ug/L	47.0		82.3	70-130			
1,2,4-Trimethylbenzene	52.2			ug/L	47.0		111	80-120			
1,2-Dibromo-3-chloropropane	44.6			ug/L	47.0		95.0	72.9-128			
1,2-Dibromoethane (EDB)	47.6			ug/L	47.0		101	80-120			
1,2-Dichlorobenzene	46.7			ug/L	47.0		99.5	75-125			
1,2-Dichloroethane	47.8			ug/L	47.0		102	77.7-121			
1,2-Dichloropropane	48.8			ug/L	47.0		104	80-120			
1,3,5-Trimethylbenzene	52.9			ug/L	47.0		113	80-120			
1,3-Dichlorobenzene	48.0			ug/L	47.0		102	75-125			
1,3-Dichloropropane	47.7			ug/L	47.0		101	80-120			
1,4-Dichlorobenzene	46.5			ug/L	47.0		99.0	75-125			
2,2-Dichloropropane	52.5			ug/L	47.0		112	66.6-134			
2-Butanone	43.1			ug/L	47.0		91.8	75-125			
2-Chlorotoluene	51.5			ug/L	47.0		110	78.7-120			
4-Chlorotoluene	51.4			ug/L	47.0		109	80-120			
Acetone	37.1			ug/L	47.0		79.0	75-125			
Allyl chloride	49.9			ug/L	47.0		106	75-125			
Benzene	48.9			ug/L	47.0		104	80-120			
Bromobenzene	51.4			ug/L	47.0		109	79.4-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

LCS (B0G0620-BS1)

Prepared & Analyzed: 07/03/20

Bromochloromethane	49.4			ug/L	47.0		105	75.3-124			
Bromodichloromethane	47.6			ug/L	47.0		101	80-120			
Bromoform	46.9			ug/L	47.0		99.9	80-120			
Bromomethane	45.2			ug/L	47.0		96.2	70-130			
Carbon tetrachloride	48.8			ug/L	47.0		104	80-120			
Chlorobenzene	47.6			ug/L	47.0		101	80-120			
Chloroethane	47.1			ug/L	47.0		100	75-125			
Chloroform	48.5			ug/L	47.0		103	80-120			
Chloromethane	50.4			ug/L	47.0		107	75-130			
cis-1,2-Dichloroethene	48.1			ug/L	47.0		102	80-120			
cis-1,3-Dichloropropene	48.9			ug/L	47.0		104	80-120			
Dibromochloromethane	47.4			ug/L	47.0		101	80-120			
Dibromomethane	48.7			ug/L	47.0		104	80-120			
Dichlorodifluoromethane	54.5			ug/L	47.0		116	70-130			
Dichlorofluoromethane	45.8			ug/L	47.0		97.5	74-125			
Ethyl ether	47.5			ug/L	47.0		101	77.9-123			
Ethylbenzene	48.8			ug/L	47.0		104	80-120			
Hexachlorobutadiene	44.0			ug/L	47.0		93.7	70-130			
Isopropylbenzene	54.5			ug/L	47.0		116	75.9-120			
m,p-Xylene	97.7			ug/L	94.1		104	80-120			
Methyl isobutyl ketone	47.2			ug/L	47.0		100	76.6-124			
Methyl tert-butyl ether	48.8			ug/L	47.0		104	80-120			
Methylene chloride	47.5			ug/L	47.0		101	75-120			
Naphthalene	39.3			ug/L	47.0		83.6	70-128			
n-Butylbenzene	51.9			ug/L	47.0		110	75-125			
n-Propylbenzene	53.4			ug/L	47.0		114	77.7-120			
o-Xylene	48.6			ug/L	47.0		103	80-120			
p-Isopropyltoluene	50.8			ug/L	47.0		108	75-125			
sec-Butylbenzene	53.2			ug/L	47.0		113	75-125			
Styrene	48.8			ug/L	47.0		104	80-120			
tert-Butylbenzene	53.2			ug/L	47.0		113	79.8-120			
Tetrachloroethene	47.8			ug/L	47.0		102	80-120			
Tetrahydrofuran	47.3			ug/L	47.0		101	75-125			
Toluene	49.4			ug/L	47.0		105	80-120			
trans-1,2-Dichloroethene	47.8			ug/L	47.0		102	79.8-120			
trans-1,3-Dichloropropene	47.2			ug/L	47.0		100	80-120			
Trichloroethene	46.1			ug/L	47.0		98.0	80-120			
Trichlorofluoromethane	48.2			ug/L	47.0		103	70.4-130			
Vinyl chloride	49.4			ug/L	47.0		105	75-130			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

LCS (B0G0620-BS1)

Prepared & Analyzed: 07/03/20

Surrogate: 4-Bromofluorobenzene	48.9			ug/L	52.4		93.4	80-120			
Surrogate: Dibromofluoromethane	49.4			ug/L	52.4		94.2	80-120			
Surrogate: Toluene-d8	51.5			ug/L	52.4		98.2	80-120			

Matrix Spike (B0G0620-MS1)

Source: 2002551-01

Prepared & Analyzed: 07/03/20

1,1,1,2-Tetrachloroethane	49.2			ug/L	47.0	0.00	105	80-120			
1,1,1-Trichloroethane	48.7			ug/L	47.0	0.00	104	80-120			
1,1,2,2-Tetrachloroethane	50.5			ug/L	47.0	0.00	107	75-125			
1,1,2-Trichloroethane	47.7			ug/L	47.0	0.00	102	80-120			
1,1,2-Trichlorotrifluoroethane	47.3			ug/L	47.0	0.00	101	80-120			
1,1-Dichloroethane	48.3			ug/L	47.0	0.00	103	80-120			
1,1-Dichloroethene	48.0			ug/L	47.0	0.00	102	79.5-120			
1,1-Dichloropropene	48.4			ug/L	47.0	0.00	103	80-120			
1,2,3-Trichlorobenzene	35.2			ug/L	47.0	0.00	74.8	70-130			
1,2,3-Trichloropropane	48.0			ug/L	47.0	0.00	102	75-125			
1,2,4-Trichlorobenzene	37.0			ug/L	47.0	0.00	78.7	70-130			
1,2,4-Trimethylbenzene	51.2			ug/L	47.0	0.00	109	80-120			
1,2-Dibromo-3-chloropropane	41.7			ug/L	47.0	0.00	88.7	73.6-128			
1,2-Dibromoethane (EDB)	48.3			ug/L	47.0	0.00	103	80-120			
1,2-Dichlorobenzene	46.6			ug/L	47.0	0.00	99.0	75-125			
1,2-Dichloroethane	47.5			ug/L	47.0	0.00	101	80-120			
1,2-Dichloropropane	48.5			ug/L	47.0	0.00	103	80-120			
1,3,5-Trimethylbenzene	51.2			ug/L	47.0	0.00	109	80-120			
1,3-Dichlorobenzene	47.0			ug/L	47.0	0.00	100	75-125			
1,3-Dichloropropane	48.3			ug/L	47.0	0.00	103	80-120			
1,4-Dichlorobenzene	46.1			ug/L	47.0	0.00	98.1	75-125			
2,2-Dichloropropane	49.2			ug/L	47.0	0.00	105	60-134			
2-Butanone	42.2			ug/L	47.0	0.00	89.8	75-125			
2-Chlorotoluene	50.6			ug/L	47.0	0.00	108	78.7-120			
4-Chlorotoluene	49.6			ug/L	47.0	0.00	106	79.3-120			
Acetone	36.2			ug/L	47.0	0.00	77.0	75-125			
Allyl chloride	49.2			ug/L	47.0	0.00	105	75-125			
Benzene	49.0			ug/L	47.0	0.00	104	80-120			
Bromobenzene	49.5			ug/L	47.0	0.00	105	79.4-120			
Bromochloromethane	48.9			ug/L	47.0	0.00	104	75.8-123			
Bromodichloromethane	47.8			ug/L	47.0	0.00	102	80-120			
Bromoform	47.9			ug/L	47.0	0.00	102	80-120			
Bromomethane	40.5			ug/L	47.0	0.00	86.1	70-130			
Carbon tetrachloride	49.0			ug/L	47.0	0.00	104	80-120			
Chlorobenzene	49.3			ug/L	47.0	0.00	105	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

Matrix Spike (B0G0620-MS1)

Source: 2002551-01

Prepared & Analyzed: 07/03/20

Chloroethane	45.4			ug/L	47.0	0.00	96.7	73.8-125			
Chloroform	48.6			ug/L	47.0	0.00	103	80-120			
Chloromethane	46.2			ug/L	47.0	0.00	98.2	75-130			
cis-1,2-Dichloroethene	48.7			ug/L	47.0	0.00	104	80-120			
cis-1,3-Dichloropropene	47.9			ug/L	47.0	0.00	102	80-120			
Dibromochloromethane	48.3			ug/L	47.0	0.00	103	80-120			
Dibromomethane	48.9			ug/L	47.0	0.00	104	80-120			
Dichlorodifluoromethane	58.1			ug/L	47.0	0.00	124	70-130			
Dichlorofluoromethane	45.7			ug/L	47.0	0.00	97.2	73.5-127			
Ethyl ether	47.0			ug/L	47.0	0.00	100	77.6-124			
Ethylbenzene	50.1			ug/L	47.0	0.00	107	80-120			
Hexachlorobutadiene	41.2			ug/L	47.0	0.00	87.7	70-130			
Isopropylbenzene	51.5			ug/L	47.0	0.00	109	76.9-120			
m,p-Xylene	98.3			ug/L	94.1	0.00	104	80-120			
Methyl isobutyl ketone	47.0			ug/L	47.0	0.00	100	75.2-125			
Methyl tert-butyl ether	48.5			ug/L	47.0	0.00	103	80-120			
Methylene chloride	48.1			ug/L	47.0	0.00	102	76.7-120			
Naphthalene	36.0			ug/L	47.0	0.00	76.6	70-130			
n-Butylbenzene	50.9			ug/L	47.0	0.00	108	75-125			
n-Propylbenzene	51.1			ug/L	47.0	0.00	109	77.7-120			
o-Xylene	50.2			ug/L	47.0	0.00	107	80-120			
p-Isopropyltoluene	50.6			ug/L	47.0	0.00	108	75-125			
sec-Butylbenzene	51.2			ug/L	47.0	0.00	109	75-125			
Styrene	50.2			ug/L	47.0	0.00	107	80-120			
tert-Butylbenzene	50.7			ug/L	47.0	0.00	108	79.4-120			
Tetrachloroethene	47.6			ug/L	47.0	0.00	101	80-120			
Tetrahydrofuran	46.4			ug/L	47.0	0.00	98.7	75-125			
Toluene	48.4			ug/L	47.0	0.00	103	80-120			
trans-1,2-Dichloroethene	47.3			ug/L	47.0	0.00	101	80-120			
trans-1,3-Dichloropropene	46.6			ug/L	47.0	0.00	99.1	80-120			
Trichloroethene	46.5			ug/L	47.0	0.00	98.9	80-120			
Trichlorofluoromethane	46.8			ug/L	47.0	0.00	99.7	73.3-127			
Vinyl chloride	45.9			ug/L	47.0	0.00	97.6	75-130			
Surrogate: 4-Bromofluorobenzene	50.7			ug/L	52.4		96.8	80-120			
Surrogate: Dibromofluoromethane	50.0			ug/L	52.4		95.5	80-120			
Surrogate: Toluene-d8	51.5			ug/L	52.4		98.2	80-120			

Matrix Spike Dup (B0G0620-MSD1)

Source: 2002551-01

Prepared & Analyzed: 07/03/20

1,1,1,2-Tetrachloroethane	47.4			ug/L	47.0	0.00	101	80-120	3.73	20	
1,1,1-Trichloroethane	48.4			ug/L	47.0	0.00	103	80-120	0.660	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

Matrix Spike Dup (B0G0620-MSD1)

Source: 2002551-01

Prepared & Analyzed: 07/03/20

1,1,2,2-Tetrachloroethane	49.8			ug/L	47.0	0.00	106	75-125	1.27	20	
1,1,2-Trichloroethane	46.2			ug/L	47.0	0.00	98.2	80-120	3.35	20	
1,1,2-Trichlorotrifluoroethane	49.2			ug/L	47.0	0.00	105	80-120	3.84	20	
1,1-Dichloroethane	48.7			ug/L	47.0	0.00	104	80-120	0.797	20	
1,1-Dichloroethene	46.9			ug/L	47.0	0.00	99.9	79.5-120	2.21	20	
1,1-Dichloropropene	47.9			ug/L	47.0	0.00	102	80-120	1.04	20	
1,2,3-Trichlorobenzene	34.9			ug/L	47.0	0.00	74.3	70-130	0.707	25	
1,2,3-Trichloropropane	48.9			ug/L	47.0	0.00	104	75-125	2.02	20	
1,2,4-Trichlorobenzene	36.2			ug/L	47.0	0.00	77.0	70-130	2.18	25	
1,2,4-Trimethylbenzene	51.8			ug/L	47.0	0.00	110	80-120	1.09	20	
1,2-Dibromo-3-chloropropane	40.8			ug/L	47.0	0.00	86.7	73.6-128	2.28	20	
1,2-Dibromoethane (EDB)	48.2			ug/L	47.0	0.00	102	80-120	0.387	20	
1,2-Dichlorobenzene	45.0			ug/L	47.0	0.00	95.8	75-125	3.36	20	
1,2-Dichloroethane	47.0			ug/L	47.0	0.00	100	80-120	1.02	20	
1,2-Dichloropropane	48.1			ug/L	47.0	0.00	102	80-120	0.837	20	
1,3,5-Trimethylbenzene	51.6			ug/L	47.0	0.00	110	80-120	0.777	20	
1,3-Dichlorobenzene	47.4			ug/L	47.0	0.00	101	75-125	0.769	20	
1,3-Dichloropropane	47.8			ug/L	47.0	0.00	102	80-120	1.17	20	
1,4-Dichlorobenzene	45.6			ug/L	47.0	0.00	97.1	75-125	1.09	20	
2,2-Dichloropropane	48.4			ug/L	47.0	0.00	103	60-134	1.73	20	
2-Butanone	42.8			ug/L	47.0	0.00	91.1	75-125	1.38	20	
2-Chlorotoluene	50.9			ug/L	47.0	0.00	108	78.7-120	0.585	20	
4-Chlorotoluene	50.1			ug/L	47.0	0.00	107	79.3-120	0.977	20	
Acetone	37.8			ug/L	47.0	0.00	80.4	75-125	4.35	25	
Allyl chloride	49.0			ug/L	47.0	0.00	104	75-125	0.407	20	
Benzene	48.1			ug/L	47.0	0.00	102	80-120	1.78	20	
Bromobenzene	50.5			ug/L	47.0	0.00	108	79.4-120	2.10	20	
Bromochloromethane	48.9			ug/L	47.0	0.00	104	75.8-123	0.0121	20	
Bromodichloromethane	47.0			ug/L	47.0	0.00	99.9	80-120	1.77	20	
Bromoform	46.8			ug/L	47.0	0.00	99.5	80-120	2.37	20	
Bromomethane	42.9			ug/L	47.0	0.00	91.2	70-130	5.78	20	
Carbon tetrachloride	48.9			ug/L	47.0	0.00	104	80-120	0.201	20	
Chlorobenzene	47.5			ug/L	47.0	0.00	101	80-120	3.88	20	
Chloroethane	46.9			ug/L	47.0	0.00	99.7	73.8-125	3.14	20	
Chloroform	48.3			ug/L	47.0	0.00	103	80-120	0.613	20	
Chloromethane	48.0			ug/L	47.0	0.00	102	75-130	3.98	20	
cis-1,2-Dichloroethene	47.9			ug/L	47.0	0.00	102	80-120	1.64	20	
cis-1,3-Dichloropropene	47.6			ug/L	47.0	0.00	101	80-120	0.668	20	
Dibromochloromethane	47.3			ug/L	47.0	0.00	101	80-120	2.18	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G0620 - EPA 5035A Soil (Purge and Trap)

Matrix Spike Dup (B0G0620-MSD1)

Source: 2002551-01

Prepared & Analyzed: 07/03/20

Dibromomethane	47.5			ug/L	47.0	0.00	101	80-120	2.95	20	
Dichlorodifluoromethane	52.4			ug/L	47.0	0.00	111	70-130	10.3	20	
Dichlorofluoromethane	44.8			ug/L	47.0	0.00	95.4	73.5-127	1.92	20	
Ethyl ether	46.5			ug/L	47.0	0.00	99.0	77.6-124	1.08	20	
Ethylbenzene	49.1			ug/L	47.0	0.00	104	80-120	2.03	20	
Hexachlorobutadiene	41.2			ug/L	47.0	0.00	87.6	70-130	0.104	22	
Isopropylbenzene	52.3			ug/L	47.0	0.00	111	76.9-120	1.59	20	
m,p-Xylene	94.4			ug/L	94.1	0.00	100	80-120	4.01	20	
Methyl isobutyl ketone	47.4			ug/L	47.0	0.00	101	75.2-125	0.870	20	
Methyl tert-butyl ether	47.7			ug/L	47.0	0.00	101	80-120	1.74	20	
Methylene chloride	47.3			ug/L	47.0	0.00	101	76.7-120	1.74	20	
Naphthalene	35.9			ug/L	47.0	0.00	76.4	70-130	0.220	25	
n-Butylbenzene	50.7			ug/L	47.0	0.00	108	75-125	0.383	20	
n-Propylbenzene	51.7			ug/L	47.0	0.00	110	77.7-120	1.12	20	
o-Xylene	48.6			ug/L	47.0	0.00	103	80-120	3.22	20	
p-Isopropyltoluene	50.4			ug/L	47.0	0.00	107	75-125	0.265	20	
sec-Butylbenzene	51.6			ug/L	47.0	0.00	110	75-125	0.815	20	
Styrene	48.2			ug/L	47.0	0.00	103	80-120	3.96	20	
tert-Butylbenzene	51.6			ug/L	47.0	0.00	110	79.4-120	1.82	20	
Tetrachloroethene	47.2			ug/L	47.0	0.00	100	80-120	0.975	20	
Tetrahydrofuran	45.5			ug/L	47.0	0.00	96.9	75-125	1.87	20	
Toluene	48.0			ug/L	47.0	0.00	102	80-120	0.846	20	
trans-1,2-Dichloroethene	46.9			ug/L	47.0	0.00	99.8	80-120	0.788	20	
trans-1,3-Dichloropropene	46.3			ug/L	47.0	0.00	98.5	80-120	0.639	20	
Trichloroethene	46.3			ug/L	47.0	0.00	98.6	80-120	0.298	20	
Trichlorofluoromethane	46.4			ug/L	47.0	0.00	98.7	73.3-127	0.927	20	
Vinyl chloride	47.5			ug/L	47.0	0.00	101	75-130	3.56	20	
Surrogate: 4-Bromofluorobenzene	49.4			ug/L	52.4		94.3	80-120			
Surrogate: Dibromofluoromethane	48.1			ug/L	52.4		91.9	80-120			
Surrogate: Toluene-d8	49.5			ug/L	52.4		94.4	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002496 Date Reported: 07/24/20
---	---	--

Notes and Definitions

T5	Laboratory not licensed for this parameter.
QM-10	LCS/LCSD were analyzed in place of MS/MSD.
Q9	Insufficient sample received to meet method QC requirements.
PH2	Insufficient preservative to reduce the sample pH to less than 2.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
L1	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time.
H	Results in the gasoline range contain hydrocarbons less volatile than GRO.
D1	Sample required dilution due to matrix.
D-04	The hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.
<	Less than value listed
dry	Sample results reported on a dry weight basis
NA	Not applicable. The %RPD is not calculated from values less than the reporting limit.
MDL	Method Detection Limit; Equivalent to the method LOD (Limit of Detection)
RL	Reporting Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
MS	Matrix Spike = Laboratory Fortified Matrix (LFM)

2008496

Barr Engineering Co. Chain of Custody

Sample Origination State:

- Ann Arbor Duluth Hibbing Minneapolis KS MO UT
 Bismarck Grand Rapids Jefferson City Salt Lake City MI ND WI
 MN SD Other: _____

REPORT TO	INVOICE TO
Company: <u>Barr Eng. Co</u>	Company: <u>Same</u>
Address: <u>4300 Marketposite Dr.</u>	Address: _____
Name: <u>Andrea Nood</u>	Name: _____
email: <u>anood@barr.com</u>	email: _____
Copy to: <u>datamgt@barr.com</u>	PO: _____
Project Name: <u>Boyn Mawr Park</u>	Barr Project No: <u>2321806</u>

Location	Sample Depth			Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform MS/MSD Y/N	Analysis Requested																		
	Start	Stop	Unit (m./ft. or in.)					Water					Soil													
1. GP-01-20	0	4	Ft	06/29/2020	12:00	S	N	3																		
2. GP-02-20	2	6	Ft		13:25	S		3																		
3. GP-03-20	0	4	Ft		14:00	S		3																		
4. GP-01-20	/	/	/		15:30	GW		9	X	X	X	X	X													
5. GP-02-20	3	/	Ft		13:25	S		1																		
6. GP-03-20	3	/	Ft		14:00	S		1																		
7.																										
8.																										
9.																										
10.																										

COC Number: **56583**

COC 1 of 1

Matrix Code: _____ Preservative Code: _____

GW = Groundwater A = None
 SW = Surface Water B = HCl
 WW = Waste Water C = HNO₃
 DW = Drinking Water D = H₂SO₄
 S = Soil/Solid E = NaOH
 SD = Sediment F = MeOH
 O = Other G = NaHSO₄
 H = Na₂S₂O₃
 I = Ascorbic Acid
 J = NH₄Cl
 K = Zn Acetate
 O = Other

Preservative Code: _____

Field Filtered Y/N: _____

BARR USE ONLY		Relinquished by: <u>[Signature]</u>	On Ice? <input checked="" type="checkbox"/> N	Date: <u>6/30/20</u>	Time: _____	Received by: _____	Date: _____	Time: _____
Sampled by: <u>AK83</u>		Relinquished by: _____	On Ice? <input type="checkbox"/> Y	Date: _____	Time: _____	Received by: <u>[Signature]</u>	Date: <u>6/30/20</u>	Time: <u>9:20</u>
Barr Proj. Manager: <u>SLB3</u>		Samples Shipped VIA: <input type="checkbox"/> Courier <input type="checkbox"/> Federal Express <input type="checkbox"/> Sampler			Air Bill Number: _____		Requested Due Date: _____	
Barr DQ Manager: <u>Andrea Nood</u>		<input type="checkbox"/> Other: _____					<input checked="" type="checkbox"/> Standard Turn Around Time	
Lab Name: <u>Legend Technical</u>		Lab WO: _____			Temperature on Receipt (°C): _____		<input type="checkbox"/> Rush (mm/dd/yyyy)	
Lab Location: <u>Saint Paul, MN</u>		Custody Seal Intact? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> None						

Distribution - White-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Pink Copy: Send to Data Management Administrators.

H:\RLG\STDFORMS\Chain of Custody Form 2015 RLG Rev. 01/02/18

20320

Data File: \\lts-target\targetdata\chen\FID5,i\200708jet,b\100.d

Page 2

Date : 10-JUL-2020 14:56

Client ID:

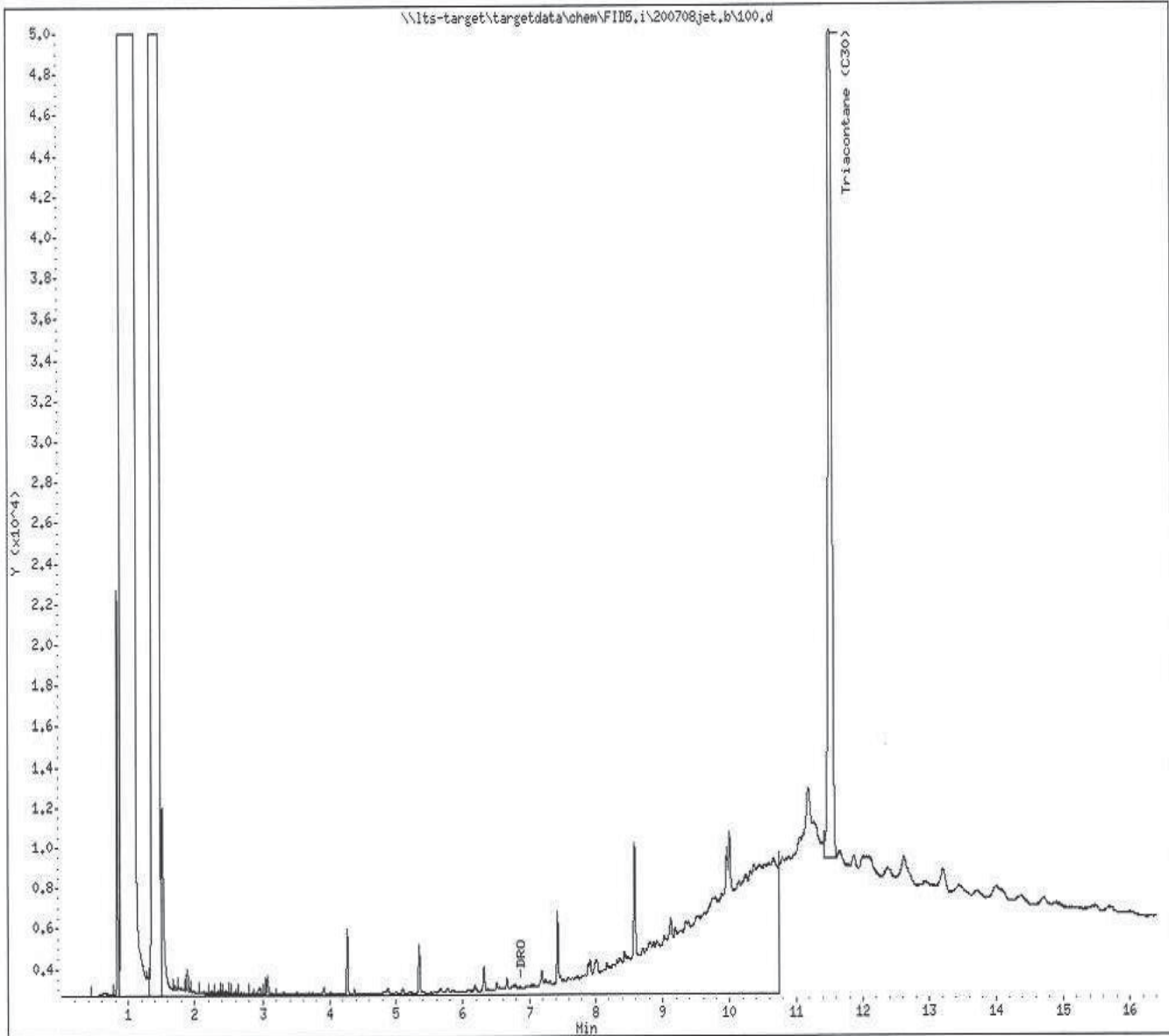
Instrument: FID5.i

Sample Info: 2002496-01 sil rr

Operator: yp

Column phaset:

Column diameter: 0,53



Data File: \\its-target\targetdata\chem\FID5, i\200708jet, b\063, d

Page 2

Date : 10-JUL-2020 01:47

Client ID:

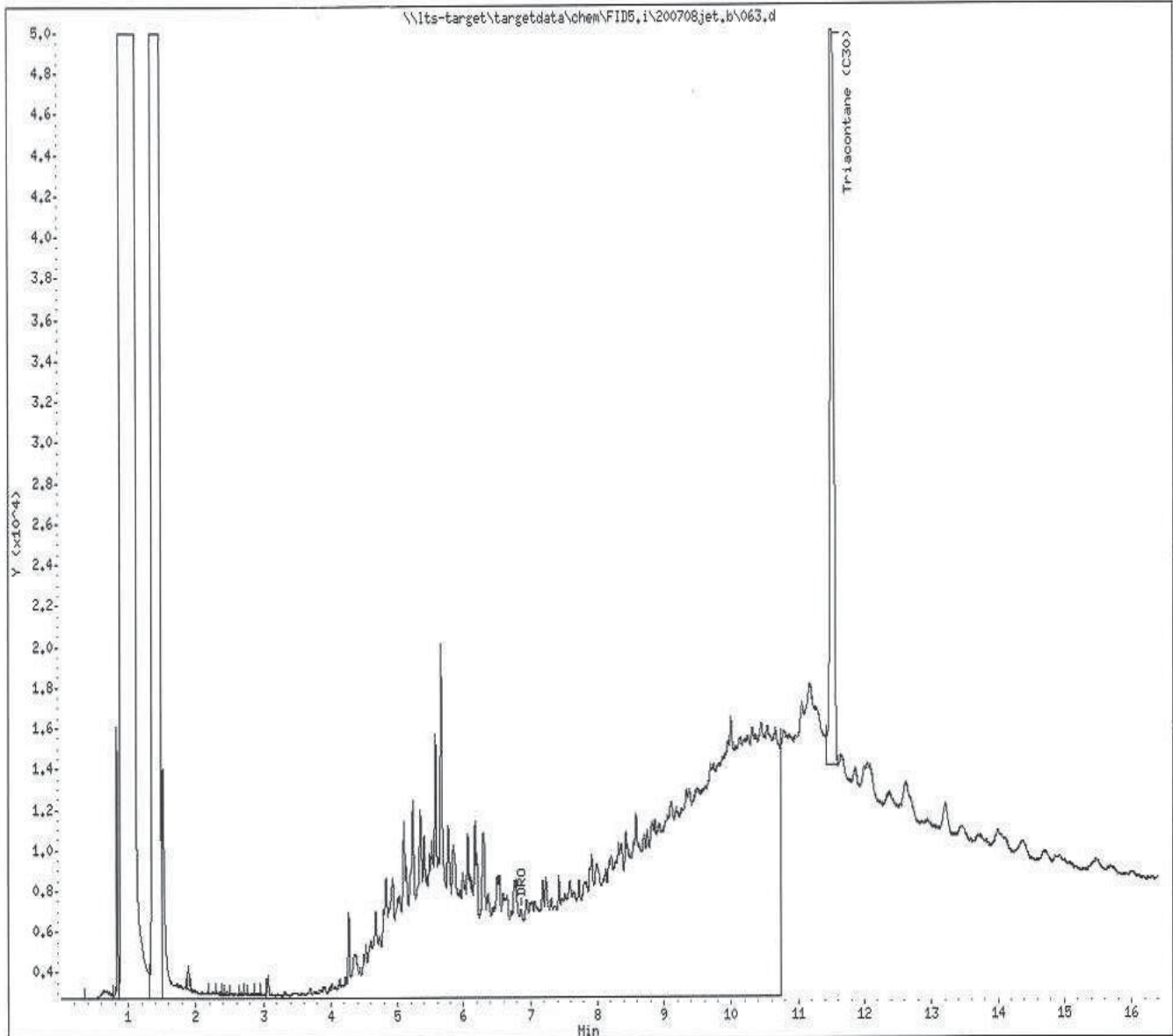
Instrument: FID5.i

Sample Info: 2002496-02 sil

Operator: yg

Column phase:

Column diameter: 0,53



Data File: \\lts-target\targetdata\chem\FID5.i\200708jet,b\097.d

Page 2

Date : 10-JUL-2020 13:52

Client ID:

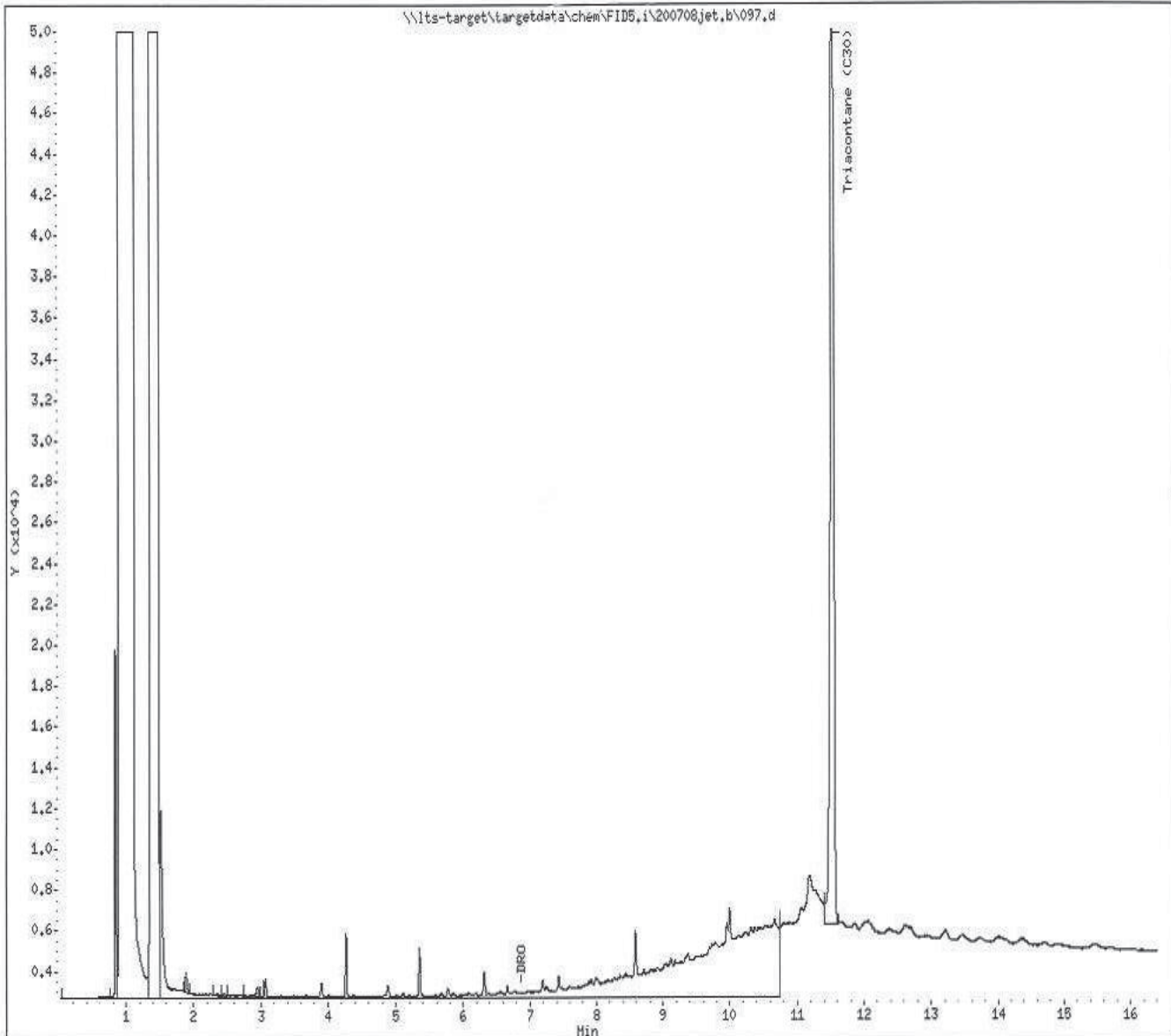
Instrument: FID5.i

Sample Info: 2002496-03 sil m

Operator: yp

Column phase:

Column diameter: 0.53



September 23, 2020

REVISION

Ms. Andrea Nord
Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435

Work Order Number: 2002758
RE: 23271806

This is a revised report. The details of the revision are listed in the case narrative on the following page.

Enclosed are the results of analyses for samples received by the laboratory on 07/16/20. If you have any questions concerning this report, please feel free to contact me.

Results are not blank corrected unless noted within the report. Additionally, all QC results meet requirements unless noted.


The results in this report apply to the samples as received.

All samples will be retained by Legend Technical Services, Inc., unless consumed in the analysis, at ambient conditions for 30 days from the date of this report and then discarded unless other arrangements are made. All samples were received in acceptable condition unless otherwise noted.

All test results and QC meet requirements of the 2003 NELAC standard.

MDH (NELAC) Accreditation #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC

 Digitally signed by Bach Pham
DN: cn=Bach Pham, o, ou,
email=bpham@legend-
group.com, c=US
Date: 2020.09.23 15:23:53 -05'00'

Bach Pham
Client Manager II
bpham@legend-group.com

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GP-04-20_0-3	2002758-01	Soil	07/15/20 09:00	07/16/20 09:35
GP-05-20_0-3	2002758-02	Soil	07/15/20 10:30	07/16/20 09:35
GP-05-20_5-7	2002758-03	Soil	07/15/20 10:30	07/16/20 09:35
GP-05-20_6-6	2002758-04	Soil	07/15/20 10:30	07/16/20 09:35
GP-06-20_0-3.5	2002758-05	Soil	07/15/20 11:40	07/16/20 09:35
GP-07-20_5-7	2002758-06	Soil	07/15/20 13:30	07/16/20 09:35
GP-07-20_14-15	2002758-07	Soil	07/15/20 13:50	07/16/20 09:35
GP-08-20_2-6	2002758-08	Soil	07/15/20 14:20	07/16/20 09:35
GP-08-20_5-6	2002758-09	Soil	07/15/20 14:20	07/16/20 09:35
GP-06-20	2002758-10	Groundwater	07/15/20 12:20	07/16/20 09:35
GP-08-20	2002758-11	Groundwater	07/15/20 15:00	07/16/20 09:35
Trip Blank	2002758-12	Water	07/15/20 00:00	07/16/20 09:35

Shipping Container Information

Default Cooler	Temperature (°C): 1.3	
Received on ice: Yes	Temperature blank was present	Received on ice pack: No
Received on melt water: No	Ambient: No	Acceptable (IH/ISO only): No
Custody seals: No		

Case Narrative:

Per the client's instructions, the % Solids results from samples that shared the same sample times were used for samples missing snap caps.

The spike recovery for Lead was below laboratory acceptance limits in the 6010D batch B0G1703 MS, and the spike recoveries for Barium and Lead were outside laboratory acceptance limits in the MSD. All remaining spike recoveries were within acceptance limits in the batch LCS/LCSD. The MS/MSD source sample was GP-04-20_0-3.

The recoveries for several compounds in the 8270E batch B0G1628 BS/MS/MSD were below laboratory acceptance limits.

The recovery for 8270E surrogate Nitrobenzene-d5 was outside laboratory acceptance limits in sample GP-05-20_5-7. Data was accepted based on the valid recoveries of the remaining surrogates.

The spike recovery for Acetone was below laboratory acceptance limits in the 8260D batch B0G1726 MS/MSD, but within acceptance limits in the batch LCS. The MS/MSD source sample was not associated with this work order.

The DRO chromatograms are attached for samples GP-04-20_0-3, GP-05-20_5-7, GP-06-20_0-3.5, and GP-07-20_5-7.

At the client's request, this report was revised on September 10, 2020 to edit the sample IDs for all samples. The case narrative was also edited to reflect these changes. This report supersedes the report dated July 31, 2020.

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-04-20_0-3 (2002758-01) Soil Sampled: 07/15/20 09:00 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	31	6.3	3.1	mg/kg dry	1	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	D-04
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	103			56.8-136 %		"	"	"	"	
GP-05-20_0-3 (2002758-02) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	<7.1	7.1	3.5	mg/kg dry	1	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	98.0			56.8-136 %		"	"	"	"	
GP-05-20_5-7 (2002758-03) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	77	5.9	2.9	mg/kg dry	1	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	D-04
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	82.2			56.8-136 %		"	"	"	"	
GP-06-20_0-3.5 (2002758-05) Soil Sampled: 07/15/20 11:40 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	68	11	5.5	mg/kg dry	2	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	D-04
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	98.1			56.8-136 %		"	"	"	"	
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	34	6.4	3.1	mg/kg dry	1	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	D-04
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	82.6			56.8-136 %		"	"	"	"	
GP-07-20_14-15 (2002758-07) Soil Sampled: 07/15/20 13:50 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	<5.8	5.8	2.8	mg/kg dry	1	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	87.8			56.8-136 %		"	"	"	"	
GP-08-20_2-6 (2002758-08) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	<6.6	6.6	3.2	mg/kg dry	1	B0G1712	07/17/20	07/27/20	WI(95)DRO(M)	
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	101			56.8-136 %		"	"	"	"	
GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	<110	110	57	ug/L	1	B0G2118	07/21/20	07/22/20	WI(95)DRO(M)	
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	94.9			57.9-117 %		"	"	"	"	
GP-08-20 (2002758-11) Groundwater Sampled: 07/15/20 15:00 Received: 07/16/20 9:35										
DRO (Silica Gel Cleanup)	<110	110	58	ug/L	1	B0G2118	07/21/20	07/22/20	WI(95)DRO(M)	
Surrogate: <i>Triacotane (C-30) (Silica Gel)</i>	102			57.9-117 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-05-20_6-6 (2002758-04) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
Gasoline range organics	<5.6	5.6	1.9	mg/kg dry	1	B0G2320	07/23/20	07/23/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	98.9			80-150 %		"	"	"	"	
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
Gasoline range organics	<5.7	5.7	1.9	mg/kg dry	1	B0G2320	07/23/20	07/23/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	104			80-150 %		"	"	"	"	
GP-08-20_5-6 (2002758-09) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
Gasoline range organics	<5.6	5.6	1.9	mg/kg dry	1	B0G2320	07/23/20	07/23/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	96.6			80-150 %		"	"	"	"	
GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
Gasoline range organics	<100	100	31	ug/L	1	B0G2202	07/22/20	07/22/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	100			80-150 %		"	"	"	"	
GP-08-20 (2002758-11) Groundwater Sampled: 07/15/20 15:00 Received: 07/16/20 9:35										
Gasoline range organics	<100	100	31	ug/L	1	B0G2202	07/22/20	07/22/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	100			80-150 %		"	"	"	"	
Trip Blank (2002758-12) Water Sampled: 07/15/20 00:00 Received: 07/16/20 9:35										
Gasoline range organics	<100	100	31	ug/L	1	B0G2202	07/22/20	07/22/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	100			80-150 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

DISSOLVED METAL ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
Arsenic	<0.020	0.020	0.013	mg/L	1	B0G2205	07/22/20	07/24/20	EPA 6010D (Dissolved)	
Barium	0.23	0.020	0.00092	mg/L	1	"	"	"	"	"
Cadmium	<0.0010	0.0010	0.00023	mg/L	1	"	"	"	"	"
Chromium	<0.010	0.010	0.00039	mg/L	1	"	"	"	"	"
Lead	<0.015	0.015	0.0019	mg/L	1	"	"	"	"	"
Mercury	<0.010	0.010	0.0033	mg/L	1	"	"	"	"	"
Selenium	<0.050	0.050	0.0060	mg/L	1	"	"	"	"	"
Silver	<0.010	0.010	0.00081	mg/L	1	"	"	"	"	"
GP-08-20 (2002758-11) Groundwater Sampled: 07/15/20 15:00 Received: 07/16/20 9:35										
Arsenic	<0.020	0.020	0.013	mg/L	1	B0G2205	07/22/20	07/24/20	EPA 6010D (Dissolved)	
Barium	0.15	0.020	0.00092	mg/L	1	"	"	"	"	"
Cadmium	<0.0010	0.0010	0.00023	mg/L	1	"	"	"	"	"
Chromium	<0.010	0.010	0.00039	mg/L	1	"	"	"	"	"
Lead	<0.015	0.015	0.0019	mg/L	1	"	"	"	"	"
Mercury	<0.010	0.010	0.0033	mg/L	1	"	"	"	"	"
Selenium	<0.050	0.050	0.0060	mg/L	1	"	"	"	"	"
Silver	<0.010	0.010	0.00081	mg/L	1	"	"	"	"	"

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-04-20_0-3 (2002758-01) Soil Sampled: 07/15/20 09:00 Received: 07/16/20 9:35										
Arsenic	5.7	1.1	0.70	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Barium	96	1.1	0.051	mg/kg dry	1	"	"	"	"	M1
Cadmium	0.41	0.055	0.012	mg/kg dry	1	"	"	"	"	
Chromium	14	0.55	0.022	mg/kg dry	1	"	"	"	"	
Lead	90	0.82	0.10	mg/kg dry	1	"	"	"	"	M1, M2, QR-04
Mercury	0.74	0.55	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.55	0.55	0.045	mg/kg dry	1	"	"	"	"	
GP-05-20_0-3 (2002758-02) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
Arsenic	3.0	1.2	0.75	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Barium	65	1.2	0.054	mg/kg dry	1	"	"	"	"	
Cadmium	0.12	0.059	0.013	mg/kg dry	1	"	"	"	"	
Chromium	9.7	0.59	0.024	mg/kg dry	1	"	"	"	"	
Lead	49	0.88	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.59	0.59	0.20	mg/kg dry	1	"	"	"	"	
Selenium	<2.9	2.9	0.35	mg/kg dry	1	"	"	"	"	
Silver	<0.59	0.59	0.048	mg/kg dry	1	"	"	"	"	
GP-05-20_5-7 (2002758-03) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
Arsenic	2.3	1.1	0.72	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Barium	46	1.1	0.052	mg/kg dry	1	"	"	"	"	
Cadmium	0.073	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	8.8	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	8.7	0.84	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	
GP-06-20_0-3.5 (2002758-05) Soil Sampled: 07/15/20 11:40 Received: 07/16/20 9:35										
Arsenic	3.5	1.1	0.70	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Barium	78	1.1	0.051	mg/kg dry	1	"	"	"	"	
Cadmium	0.23	0.055	0.012	mg/kg dry	1	"	"	"	"	
Chromium	13	0.55	0.022	mg/kg dry	1	"	"	"	"	
Lead	130	0.82	0.10	mg/kg dry	1	"	"	"	"	
Mercury	<0.55	0.55	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.55	0.55	0.045	mg/kg dry	1	"	"	"	"	
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
Arsenic	3.1	1.1	0.73	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
Barium	84	1.1	0.052	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Cadmium	0.12	0.057	0.012	mg/kg dry	1	"	"	"	"	
Chromium	11	0.57	0.023	mg/kg dry	1	"	"	"	"	
Lead	56	0.85	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.57	0.57	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.57	0.57	0.047	mg/kg dry	1	"	"	"	"	
GP-07-20_14-15 (2002758-07) Soil Sampled: 07/15/20 13:50 Received: 07/16/20 9:35										
Arsenic	1.5	1.1	0.71	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Barium	18	1.1	0.051	mg/kg dry	1	"	"	"	"	
Cadmium	<0.056	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	8.3	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	2.0	0.83	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	
GP-08-20_2-6 (2002758-08) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
Arsenic	3.4	1.1	0.71	mg/kg dry	1	B0G1703	07/17/20	07/20/20	EPA 6010D	
Barium	51	1.1	0.051	mg/kg dry	1	"	"	"	"	
Cadmium	0.18	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	11	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	29	0.83	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-04-20_0-3 (2002758-01) Soil Sampled: 07/15/20 09:00 Received: 07/16/20 9:35										
2-Chloronaphthalene	<0.36	0.36	0.040	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.36	0.36	0.041	mg/kg dry	1	"	"	"	"	
Anthracene	<0.36	0.36	0.046	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	1.7	0.36	0.065	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	1.3	0.36	0.040	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	1.6	0.36	0.051	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	0.69	0.36	0.070	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	0.66	0.36	0.041	mg/kg dry	1	"	"	"	"	
Chrysene	1.8	0.36	0.059	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.36	0.36	0.047	mg/kg dry	1	"	"	"	"	
Fluoranthene	2.7	0.36	0.059	mg/kg dry	1	"	"	"	"	
Fluorene	<0.36	0.36	0.048	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.78	0.36	0.048	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.36	0.36	0.037	mg/kg dry	1	"	"	"	"	
Phenanthrene	0.66	0.36	0.049	mg/kg dry	1	"	"	"	"	
Pyrene	2.4	0.36	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	66.3			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	60.2			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	90.5			36.6-110 %		"	"	"	"	

GP-05-20_0-3 (2002758-02) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
2-Chloronaphthalene	<0.39	0.39	0.042	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.39	0.39	0.042	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.39	0.39	0.042	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.39	0.39	0.044	mg/kg dry	1	"	"	"	"	
Anthracene	<0.39	0.39	0.049	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.39	0.39	0.069	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.39	0.39	0.042	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.39	0.39	0.054	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.39	0.39	0.075	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.39	0.39	0.044	mg/kg dry	1	"	"	"	"	
Chrysene	<0.39	0.39	0.064	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.39	0.39	0.051	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.39	0.39	0.064	mg/kg dry	1	"	"	"	"	
Fluorene	<0.39	0.39	0.052	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.39	0.39	0.052	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.39	0.39	0.040	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.39	0.39	0.053	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-05-20_0-3 (2002758-02) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
Pyrene	<0.39	0.39	0.067	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
Surrogate: 2-Fluorobiphenyl	64.5			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	62.6			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	98.8			36.6-110 %		"	"	"	"	

GP-05-20_5-7 (2002758-03) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
2-Chloronaphthalene	<0.37	0.37	0.040	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.37	0.37	0.042	mg/kg dry	1	"	"	"	"	
Anthracene	<0.37	0.37	0.047	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.37	0.37	0.066	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.37	0.37	0.052	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.37	0.37	0.072	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.37	0.37	0.042	mg/kg dry	1	"	"	"	"	
Chrysene	<0.37	0.37	0.061	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.37	0.37	0.048	mg/kg dry	1	"	"	"	"	
Fluoranthene	0.39	0.37	0.061	mg/kg dry	1	"	"	"	"	
Fluorene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.37	0.37	0.038	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.37	0.37	0.051	mg/kg dry	1	"	"	"	"	
Pyrene	<0.37	0.37	0.064	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	55.4			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	41.5			50.7-84.5 %		"	"	"	"	S-BN
Surrogate: Terphenyl-d14	92.1			36.6-110 %		"	"	"	"	

GP-06-20_0-3.5 (2002758-05) Soil Sampled: 07/15/20 11:40 Received: 07/16/20 9:35										
2-Chloronaphthalene	<0.36	0.36	0.040	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.36	0.36	0.041	mg/kg dry	1	"	"	"	"	
Anthracene	<0.36	0.36	0.046	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	1.2	0.36	0.065	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	1.1	0.36	0.040	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	1.3	0.36	0.051	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	0.57	0.36	0.070	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	0.58	0.36	0.041	mg/kg dry	1	"	"	"	"	
Chrysene	1.3	0.36	0.059	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.36	0.36	0.047	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	----	-----	-------	----------	-------	----------	----------	--------	-------

GP-06-20_0-3.5 (2002758-05) Soil **Sampled: 07/15/20 11:40** **Received: 07/16/20 9:35**

Fluoranthene	1.8	0.36	0.059	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
Fluorene	<0.36	0.36	0.048	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.62	0.36	0.048	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.36	0.36	0.037	mg/kg dry	1	"	"	"	"	
Phenanthrene	0.72	0.36	0.049	mg/kg dry	1	"	"	"	"	
Pyrene	1.7	0.36	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	67.0			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	62.8			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	83.5			36.6-110 %		"	"	"	"	

GP-07-20_5-7 (2002758-06) Soil **Sampled: 07/15/20 13:30** **Received: 07/16/20 9:35**

2-Chloronaphthalene	<0.38	0.38	0.041	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.38	0.38	0.041	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.38	0.38	0.041	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.38	0.38	0.042	mg/kg dry	1	"	"	"	"	
Anthracene	<0.38	0.38	0.048	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	0.81	0.38	0.067	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	0.57	0.38	0.041	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	0.66	0.38	0.052	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.38	0.38	0.073	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.38	0.38	0.042	mg/kg dry	1	"	"	"	"	
Chrysene	0.86	0.38	0.061	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.38	0.38	0.049	mg/kg dry	1	"	"	"	"	
Fluoranthene	1.4	0.38	0.061	mg/kg dry	1	"	"	"	"	
Fluorene	<0.38	0.38	0.050	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.38	0.38	0.050	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.38	0.38	0.039	mg/kg dry	1	"	"	"	"	
Phenanthrene	0.41	0.38	0.051	mg/kg dry	1	"	"	"	"	
Pyrene	1.4	0.38	0.065	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	65.2			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	59.3			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	92.4			36.6-110 %		"	"	"	"	

GP-07-20_14-15 (2002758-07) Soil **Sampled: 07/15/20 13:50** **Received: 07/16/20 9:35**

2-Chloronaphthalene	<0.37	0.37	0.040	mg/kg dry	1	B0G2005	07/20/20	07/28/20	EPA 8270E	
2-Methylnaphthalene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.37	0.37	0.041	mg/kg dry	1	"	"	"	"	
Anthracene	<0.37	0.37	0.047	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.37	0.37	0.066	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-07-20_14-15 (2002758-07) Soil Sampled: 07/15/20 13:50 Received: 07/16/20 9:35										
Benzo(b)fluoranthene	<0.37	0.37	0.051	mg/kg dry	1	B0G2005	07/20/20	07/28/20	EPA 8270E	
Benzo(g,h,i)perylene	<0.37	0.37	0.071	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.37	0.37	0.041	mg/kg dry	1	"	"	"	"	
Chrysene	<0.37	0.37	0.060	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.37	0.37	0.048	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.37	0.37	0.060	mg/kg dry	1	"	"	"	"	
Fluorene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.37	0.37	0.038	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.37	0.37	0.050	mg/kg dry	1	"	"	"	"	
Pyrene	<0.37	0.37	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	67.7			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	68.8			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	94.6			36.6-110 %		"	"	"	"	

GP-08-20_2-6 (2002758-08) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
2-Chloronaphthalene	<0.37	0.37	0.040	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.37	0.37	0.041	mg/kg dry	1	"	"	"	"	
Anthracene	<0.37	0.37	0.047	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.37	0.37	0.066	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.37	0.37	0.040	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.37	0.37	0.051	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.37	0.37	0.071	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.37	0.37	0.041	mg/kg dry	1	"	"	"	"	
Chrysene	<0.37	0.37	0.060	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.37	0.37	0.048	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.37	0.37	0.060	mg/kg dry	1	"	"	"	"	
Fluorene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.37	0.37	0.049	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.37	0.37	0.038	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.37	0.37	0.050	mg/kg dry	1	"	"	"	"	
Pyrene	<0.37	0.37	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	65.3			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	62.3			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	94.9			36.6-110 %		"	"	"	"	

GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
2-Chloronaphthalene	<11	11	0.34	ug/L	1	B0G1628	07/16/20	07/17/20	EPA 8270E	
2-Methylnaphthalene	<11	11	0.35	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
Acenaphthene	<11	11	0.33	ug/L	1	B0G1628	07/16/20	07/17/20	EPA 8270E	
Acenaphthylene	<11	11	0.46	ug/L	1	"	"	"	"	
Anthracene	<11	11	0.46	ug/L	1	"	"	"	"	
Benzo(a)anthracene	<11	11	0.47	ug/L	1	"	"	"	"	QM-11
Benzo(a)pyrene	<11	11	0.54	ug/L	1	"	"	"	"	QM-11
Benzo(b)fluoranthene	<11	11	0.68	ug/L	1	"	"	"	"	QM-11
Benzo(g,h,i)perylene	<11	11	1.3	ug/L	1	"	"	"	"	QM-11
Benzo(k)fluoranthene	<11	11	0.53	ug/L	1	"	"	"	"	QM-11
Chrysene	<11	11	0.39	ug/L	1	"	"	"	"	QM-11
Dibenz(a,h)anthracene	<11	11	1.3	ug/L	1	"	"	"	"	QM-11
Fluoranthene	<11	11	0.81	ug/L	1	"	"	"	"	
Fluorene	<11	11	0.60	ug/L	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<11	11	1.2	ug/L	1	"	"	"	"	QM-11
Naphthalene	<11	11	0.33	ug/L	1	"	"	"	"	
Phenanthrene	<11	11	0.44	ug/L	1	"	"	"	"	
Pyrene	<11	11	0.90	ug/L	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	84.5			67.5-90.8 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	84.6			57.2-94.4 %		"	"	"	"	
Surrogate: Terphenyl-d14	42.2			30-82.6 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-04-20_0-3 (2002758-01) Soil Sampled: 07/15/20 09:00 Received: 07/16/20 9:35										
% Solids	91			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-05-20_0-3 (2002758-02) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
% Solids	85			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-05-20_5-7 (2002758-03) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
% Solids	89			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-05-20_6-6 (2002758-04) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
% Solids	89			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-06-20_0-3.5 (2002758-05) Soil Sampled: 07/15/20 11:40 Received: 07/16/20 9:35										
% Solids	91			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
% Solids	88			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-07-20_14-15 (2002758-07) Soil Sampled: 07/15/20 13:50 Received: 07/16/20 9:35										
% Solids	90			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-08-20_2-6 (2002758-08) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
% Solids	90			%	1	B0G2311	07/23/20	07/23/20	% calculation	
GP-08-20_5-6 (2002758-09) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
% Solids	90			%	1	B0G2311	07/23/20	07/23/20	% calculation	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-05-20_6-6 (2002758-04) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
1,1,1,2-Tetrachloroethane	<0.22	0.22	0.012	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.22	0.22	0.0060	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.035	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.56	0.56	0.026	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.22	0.22	0.0091	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.22	0.22	0.0080	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.22	0.22	0.030	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.044	mg/kg dry	1	"	"	"	"	M2
2-Chlorotoluene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.061	mg/kg dry	1	"	"	"	"	M2
Allyl chloride	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.22	0.22	0.0099	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
Bromoform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.22	0.22	0.054	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.22	0.22	0.0066	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Chloroform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	M2
cis-1,2-Dichloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-05-20_6-6 (2002758-04) Soil Sampled: 07/15/20 10:30 Received: 07/16/20 9:35										
cis-1,3-Dichloropropene	<0.22	0.22	0.018	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Dibromochloromethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.56	0.56	0.035	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.45	0.45	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.56	0.56	0.027	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.22	0.22	0.0083	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.22	0.22	0.0060	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.22	0.22	0.0069	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.22	0.22	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.22	0.22	0.027	mg/kg dry	1	"	"	"	"	M2
Surrogate: 4-Bromofluorobenzene	94.7			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	89.9			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	92.9			80-120 %		"	"	"	"	

GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
1,1,1,2-Tetrachloroethane	<0.23	0.23	0.012	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.23	0.23	0.022	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.23	0.23	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
1,1-Dichloroethene	<0.23	0.23	0.0060	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1-Dichloropropene	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.57	0.57	0.035	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.57	0.57	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.57	0.57	0.026	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.23	0.23	0.0092	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.23	0.23	0.0081	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.23	0.23	0.014	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.23	0.23	0.031	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.044	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.23	0.23	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.061	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.23	0.23	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.23	0.23	0.0098	mg/kg dry	1	"	"	"	"	
Bromoform	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.23	0.23	0.055	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.23	0.23	0.0067	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.23	0.23	0.022	mg/kg dry	1	"	"	"	"	
Chloroform	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.23	0.23	0.022	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.23	0.23	0.030	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.23	0.23	0.014	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-07-20_5-7 (2002758-06) Soil Sampled: 07/15/20 13:30 Received: 07/16/20 9:35										
Ethylbenzene	<0.23	0.23	0.010	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Hexachlorobutadiene	<0.57	0.57	0.035	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.45	0.45	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.23	0.23	0.030	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.57	0.57	0.027	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.57	0.57	0.034	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.23	0.23	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.23	0.23	0.0084	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.23	0.23	0.0098	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.23	0.23	0.0060	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.23	0.23	0.0069	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.23	0.23	0.0097	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.23	0.23	0.014	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.23	0.23	0.0039	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.23	0.23	0.027	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.9			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	87.8			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	91.5			80-120 %		"	"	"	"	

GP-08-20_5-6 (2002758-09) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
1,1,1,2-Tetrachloroethane	<0.22	0.22	0.012	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.22	0.22	0.0059	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-08-20_5-6 (2002758-09) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
1,2-Dibromo-3-chloropropane	<0.56	0.56	0.026	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,2-Dibromoethane (EDB)	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.22	0.22	0.0090	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.22	0.22	0.0079	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.22	0.22	0.030	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.043	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.060	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.22	0.22	0.0098	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
Bromoform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.22	0.22	0.053	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.22	0.22	0.0066	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Chloroform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.22	0.22	0.0099	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.44	0.44	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-08-20_5-6 (2002758-09) Soil Sampled: 07/15/20 14:20 Received: 07/16/20 9:35										
Methylene chloride	<0.56	0.56	0.027	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Naphthalene	<0.56	0.56	0.033	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.22	0.22	0.0082	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.22	0.22	0.0059	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.22	0.22	0.0068	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.22	0.22	0.0094	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.22	0.22	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.22	0.22	0.027	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	89.6			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	88.4			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	89.0			80-120 %		"	"	"	"	

GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.13	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
1,1,1-Trichloroethane	<1.0	1.0	0.060	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.094	ug/L	1	"	"	"	"	
1,1-Dichloroethane	<1.0	1.0	0.066	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.096	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.53	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.053	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.63	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.15	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.24	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.18	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.33	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.13	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.067	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.12	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
1,3-Dichlorobenzene	<1.0	1.0	0.43	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
1,3-Dichloropropane	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.49	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.089	ug/L	1	"	"	"	"	
2-Butanone	<20	20	2.1	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.32	ug/L	1	"	"	"	"	
Acetone	<20	20	5.0	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.19	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.059	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.23	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.081	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.24	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.075	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.36	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.097	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.23	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.10	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.19	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.046	ug/L	1	"	"	"	"	T5
Ethyl ether	<5.0	5.0	0.039	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.14	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.27	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.57	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.29	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.063	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.98	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.34	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.36	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.76	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.12	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-06-20 (2002758-10) Groundwater Sampled: 07/15/20 12:20 Received: 07/16/20 9:35										
sec-Butylbenzene	<1.0	1.0	0.11	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
Styrene	<1.0	1.0	0.21	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.063	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	1.5	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.26	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.54	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.073	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	86.5			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	87.3			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	87.5			80-120 %		"	"	"	"	

GP-08-20 (2002758-11) Groundwater Sampled: 07/15/20 15:00 Received: 07/16/20 9:35										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.13	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
1,1,1-Trichloroethane	<1.0	1.0	0.060	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.094	ug/L	1	"	"	"	"	
1,1-Dichloroethane	<1.0	1.0	0.066	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.096	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.53	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.053	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.63	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.15	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.24	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.18	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.33	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.13	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.067	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.12	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.43	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.49	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.089	ug/L	1	"	"	"	"	
2-Butanone	<20	20	2.1	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-08-20 (2002758-11) Groundwater Sampled: 07/15/20 15:00 Received: 07/16/20 9:35										
4-Chlorotoluene	<1.0	1.0	0.32	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
Acetone	<20	20	5.0	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.19	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.059	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.23	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.081	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.24	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.075	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.36	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.097	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.23	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.10	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.19	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.046	ug/L	1	"	"	"	"	T5
Ethyl ether	<5.0	5.0	0.039	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.14	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.27	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.57	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.29	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.063	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.98	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.34	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.36	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.76	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.12	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.21	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.063	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	1.5	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	----	-----	-------	----------	-------	----------	----------	--------	-------

GP-08-20 (2002758-11) Groundwater **Sampled: 07/15/20 15:00** **Received: 07/16/20 9:35**

trans-1,2-Dichloroethene	<1.0	1.0	0.26	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
trans-1,3-Dichloropropene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.54	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.073	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	91.7			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	89.4			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	92.8			80-120 %		"	"	"	"	

Trip Blank (2002758-12) Water **Sampled: 07/15/20 00:00** **Received: 07/16/20 9:35**

1,1,1,2-Tetrachloroethane	<1.0	1.0	0.13	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
1,1,1-Trichloroethane	<1.0	1.0	0.060	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.094	ug/L	1	"	"	"	"	
1,1-Dichloroethane	<1.0	1.0	0.066	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.096	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.53	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.053	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.63	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.15	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.24	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.18	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.33	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.13	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.067	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.12	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.43	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.49	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.089	ug/L	1	"	"	"	"	
2-Butanone	<20	20	2.1	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.32	ug/L	1	"	"	"	"	
Acetone	<20	20	5.0	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.19	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.059	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.23	ug/L	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (2002758-12) Water Sampled: 07/15/20 00:00 Received: 07/16/20 9:35										
Bromodichloromethane	<1.0	1.0	0.081	ug/L	1	B0G1726	07/17/20	07/17/20	EPA 8260D	
Bromoform	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.11	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.24	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.075	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.36	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.097	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.23	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.10	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.19	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.046	ug/L	1	"	"	"	"	T5
Ethyl ether	<5.0	5.0	0.039	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.14	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.27	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.57	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.29	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.063	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.98	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.34	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.36	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.18	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.76	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.12	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.21	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.063	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	1.5	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.10	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.26	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.22	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.54	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.073	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	87.1			80-120 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (2002758-12) Water Sampled: 07/15/20 00:00 Received: 07/16/20 9:35										
Surrogate: Dibromofluoromethane	89.5			80-120 %		B0G1726	07/17/20	07/17/20	EPA 8260D	
Surrogate: Toluene-d8	93.0			80-120 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

DRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G1712 - Sonication (Wisc DRO)											
Blank (B0G1712-BLK1)						Prepared: 07/17/20 Analyzed: 07/27/20					
DRO (Silica Gel Cleanup)	< 8.0	8.0	3.9	mg/kg wet							
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	16.7			mg/kg wet	16.0		105	56.8-136			
LCS (B0G1712-BS1)						Prepared: 07/17/20 Analyzed: 07/27/20					
DRO (Silica Gel Cleanup)	72.4	8.0	3.9	mg/kg wet	64.0	<8.0	113	70-120			
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	15.5			mg/kg wet	16.0		97.0	56.8-136			
LCS Dup (B0G1712-BSD1)						Prepared: 07/17/20 Analyzed: 07/28/20					
DRO (Silica Gel Cleanup)	63.3	8.0	3.9	mg/kg wet	64.0	<8.0	99.0	70-120	13.3	20	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	14.3			mg/kg wet	16.0		89.6	56.8-136			
Batch B0G2118 - EPA 3510C (Sep Funnel)											
Blank (B0G2118-BLK1)						Prepared: 07/21/20 Analyzed: 07/22/20					
DRO (Silica Gel Cleanup)	< 100	100	52	ug/L							
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	395			ug/L	400		98.8	57.9-117			
LCS (B0G2118-BS1)						Prepared: 07/21/20 Analyzed: 07/22/20					
DRO (Silica Gel Cleanup)	1720	100	52	ug/L	1600	<100	107	75-115			
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	363			ug/L	400		90.6	57.9-117			
LCS Dup (B0G2118-BSD1)						Prepared: 07/21/20 Analyzed: 07/23/20					
DRO (Silica Gel Cleanup)	1560	100	52	ug/L	1600	<100	97.7	75-115	9.32	20	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	356			ug/L	400		89.1	57.9-117			
Duplicate (B0G2118-DUP1)						Source: 2002804-02 Prepared: 07/21/20 Analyzed: 07/22/20					
DRO (Silica Gel Cleanup)	< 110	110	56	ug/L		<110			NA	33.2	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	422			ug/L	430		98.1	57.9-117			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

WI(95) GRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2202 - EPA 5030C Water (Purge and Trap)											
Blank (B0G2202-BLK1)						Prepared & Analyzed: 07/22/20					
Gasoline range organics	< 100	100	31	ug/L							
Surrogate: 4-Fluorochlorobenzene	20.0			ug/L	20.0		100	80-150			
LCS (B0G2202-BS1)						Prepared & Analyzed: 07/22/20					
Gasoline range organics	987	100	31	ug/L	1000	<100	98.7	80-120			
Surrogate: 4-Fluorochlorobenzene	21.8			ug/L	20.0		109	80-150			
LCS Dup (B0G2202-BSD1)						Prepared: 07/22/20 Analyzed: 07/23/20					
Gasoline range organics	955	100	31	ug/L	1000	<100	95.5	80-120	3.27	20	
Surrogate: 4-Fluorochlorobenzene	21.4			ug/L	20.0		107	80-150			
Duplicate (B0G2202-DUP1)						Source: 2002758-11 Prepared & Analyzed: 07/22/20					
Gasoline range organics	< 100	100	31	ug/L		<100			NA	20	
Surrogate: 4-Fluorochlorobenzene	20.4			ug/L	20.0		102	80-150			
Batch B0G2320 - EPA 5035A Soil (Purge and Trap)											
Blank (B0G2320-BLK1)						Prepared & Analyzed: 07/23/20					
Gasoline range organics	< 5.0	5.0	1.7	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	19.6			ug/L	20.0		97.8	80-150			
LCS (B0G2320-BS1)						Prepared & Analyzed: 07/23/20					
Gasoline range organics	929			ug/L	1000		92.9	80-120			
Surrogate: 4-Fluorochlorobenzene	21.4			ug/L	20.0		107	80-150			
LCS Dup (B0G2320-BSD1)						Prepared & Analyzed: 07/23/20					
Gasoline range organics	943			ug/L	1000		94.3	80-120	1.53	20	
Surrogate: 4-Fluorochlorobenzene	21.5			ug/L	20.0		107	80-150			
Duplicate (B0G2320-DUP1)						Source: 2002758-09 Prepared & Analyzed: 07/23/20					
Gasoline range organics	< 5.6	5.6	1.9	mg/kg dry		<5.6			NA	20	
Surrogate: 4-Fluorochlorobenzene	19.1			ug/L	20.0		95.6	80-150			

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2205 - EPA 200.7/3005A Digestion

Blank (B0G2205-BLK1)

Prepared: 07/22/20 Analyzed: 07/24/20

Arsenic	< 0.020	0.020	0.013	mg/L							
Barium	< 0.020	0.020	0.00092	mg/L							
Cadmium	< 0.0010	0.0010	0.00023	mg/L							
Chromium	< 0.010	0.010	0.00039	mg/L							
Lead	< 0.015	0.015	0.0019	mg/L							
Mercury	< 0.010	0.010	0.0033	mg/L							
Selenium	< 0.050	0.050	0.0060	mg/L							
Silver	< 0.010	0.010	0.00081	mg/L							

LCS (B0G2205-BS1)

Prepared: 07/22/20 Analyzed: 07/24/20

Arsenic	0.368	0.020	0.013	mg/L	0.399	<0.020	92.4	80-120			
Barium	0.379	0.020	0.00092	mg/L	0.399	<0.020	95.1	80-120			
Cadmium	0.408	0.0010	0.00023	mg/L	0.399	<0.0010	102	80-120			
Chromium	0.386	0.010	0.00039	mg/L	0.399	<0.010	96.6	80-120			
Lead	0.404	0.015	0.0019	mg/L	0.399	<0.015	101	80-120			
Mercury	0.220	0.010	0.0033	mg/L	0.250	<0.010	87.8	80-120			
Selenium	0.369	0.050	0.0060	mg/L	0.399	<0.050	92.6	80-120			
Silver	0.0374	0.010	0.00081	mg/L	0.0399	<0.010	93.7	80-120			

LCS Dup (B0G2205-BSD1)

Prepared: 07/22/20 Analyzed: 07/24/20

Arsenic	0.351	0.020	0.013	mg/L	0.399	<0.020	87.9	80-120	4.92	20	
Barium	0.367	0.020	0.00092	mg/L	0.399	<0.020	92.0	80-120	3.35	20	
Cadmium	0.390	0.0010	0.00023	mg/L	0.399	<0.0010	97.8	80-120	4.36	20	
Chromium	0.367	0.010	0.00039	mg/L	0.399	<0.010	92.1	80-120	4.81	20	
Lead	0.387	0.015	0.0019	mg/L	0.399	<0.015	97.1	80-120	4.34	20	
Mercury	0.215	0.010	0.0033	mg/L	0.250	<0.010	85.8	80-120	2.30	20	
Selenium	0.359	0.050	0.0060	mg/L	0.399	<0.050	89.9	80-120	2.94	20	
Silver	0.0360	0.010	0.00081	mg/L	0.0399	<0.010	90.2	80-120	3.81	20	

Matrix Spike (B0G2205-MS1)

Source: 2002795-01

Prepared: 07/22/20 Analyzed: 07/24/20

Arsenic	0.390	0.020	0.013	mg/L	0.399	<0.020	97.7	75-125			
Barium	0.472	0.020	0.00092	mg/L	0.399	0.113	89.9	75-125			
Cadmium	0.408	0.0010	0.00023	mg/L	0.399	<0.0010	102	75-125			
Chromium	0.383	0.010	0.00039	mg/L	0.399	<0.010	96.0	75-125			
Lead	0.395	0.015	0.0019	mg/L	0.399	<0.015	99.0	75-125			
Mercury	0.239	0.010	0.0033	mg/L	0.250	<0.010	95.8	75-125			
Selenium	0.375	0.050	0.0060	mg/L	0.399	<0.050	94.0	75-125			
Silver	0.0371	0.010	0.00081	mg/L	0.0399	<0.010	93.0	75-125			

Matrix Spike Dup (B0G2205-MSD1)

Source: 2002795-01

Prepared: 07/22/20 Analyzed: 07/24/20

Arsenic	0.396	0.020	0.013	mg/L	0.399	<0.020	99.3	75-125	1.68	20	
Barium	0.490	0.020	0.00092	mg/L	0.399	0.113	94.5	75-125	3.76	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2205 - EPA 200.7/3005A Digestion											
Matrix Spike Dup (B0G2205-MSD1)		Source: 2002795-01			Prepared: 07/22/20 Analyzed: 07/24/20						
Cadmium	0.419	0.0010	0.00023	mg/L	0.399	<0.0010	105	75-125	2.69	20	
Chromium	0.395	0.010	0.00039	mg/L	0.399	<0.010	98.9	75-125	3.01	20	
Lead	0.408	0.015	0.0019	mg/L	0.399	<0.015	102	75-125	3.17	20	
Mercury	0.241	0.010	0.0033	mg/L	0.250	<0.010	96.6	75-125	0.832	20	
Selenium	0.380	0.050	0.0060	mg/L	0.399	<0.050	95.3	75-125	1.38	20	
Silver	0.0377	0.010	0.00081	mg/L	0.0399	<0.010	94.5	75-125	1.60	20	

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1703 - EPA 3050B (M)

Blank (B0G1703-BLK1)

Prepared: 07/17/20 Analyzed: 07/20/20

Arsenic	< 1.0	1.0	0.64	mg/kg wet							
Barium	< 1.0	1.0	0.046	mg/kg wet							
Cadmium	< 0.050	0.050	0.011	mg/kg wet							
Chromium	< 0.50	0.50	0.020	mg/kg wet							
Lead	< 0.75	0.75	0.095	mg/kg wet							
Mercury	< 0.50	0.50	0.17	mg/kg wet							
Selenium	< 2.5	2.5	0.30	mg/kg wet							
Silver	< 0.50	0.50	0.041	mg/kg wet							

LCS (B0G1703-BS1)

Prepared: 07/17/20 Analyzed: 07/20/20

Arsenic	37.0	1.0	0.64	mg/kg wet	39.9	<1.0	92.9	80-120			
Barium	38.8	1.0	0.046	mg/kg wet	39.9	<1.0	97.3	80-120			
Cadmium	40.6	0.050	0.011	mg/kg wet	39.9	<0.050	102	80-120			
Chromium	39.3	0.50	0.020	mg/kg wet	39.9	<0.50	98.6	80-120			
Lead	40.1	0.75	0.095	mg/kg wet	39.9	<0.75	101	80-120			
Mercury	11.1	0.50	0.17	mg/kg wet	12.5	<0.50	88.8	80-120			
Selenium	37.2	2.5	0.30	mg/kg wet	39.9	<2.5	93.3	80-120			
Silver	3.73	0.50	0.041	mg/kg wet	3.99	<0.50	93.5	80-120			

LCS Dup (B0G1703-BSD1)

Prepared: 07/17/20 Analyzed: 07/20/20

Arsenic	36.9	1.0	0.64	mg/kg wet	39.9	<1.0	92.5	80-120	0.433	20	
Barium	38.2	1.0	0.046	mg/kg wet	39.9	<1.0	95.9	80-120	1.45	20	
Cadmium	40.0	0.050	0.011	mg/kg wet	39.9	<0.050	100	80-120	1.61	20	
Chromium	38.7	0.50	0.020	mg/kg wet	39.9	<0.50	97.1	80-120	1.49	20	
Lead	39.4	0.75	0.095	mg/kg wet	39.9	<0.75	98.8	80-120	1.75	20	
Mercury	10.9	0.50	0.17	mg/kg wet	12.5	<0.50	87.3	80-120	1.77	20	
Selenium	36.9	2.5	0.30	mg/kg wet	39.9	<2.5	92.4	80-120	0.985	20	
Silver	3.74	0.50	0.041	mg/kg wet	3.99	<0.50	93.9	80-120	0.401	20	

Matrix Spike (B0G1703-MS1)

Source: 2002758-01

Prepared: 07/17/20 Analyzed: 07/20/20

Arsenic	46.1	1.1	0.70	mg/kg dry	43.5	5.75	92.7	75-125			
Barium	147	1.1	0.051	mg/kg dry	43.5	95.7	119	75-125			
Cadmium	41.4	0.055	0.012	mg/kg dry	43.5	0.415	94.2	75-125			
Chromium	54.0	0.55	0.022	mg/kg dry	43.5	13.7	92.9	75-125			
Lead	257	0.82	0.10	mg/kg dry	43.5	89.9	384	75-125			M1
Mercury	12.7	0.55	0.19	mg/kg dry	13.6	0.737	87.6	75-125			
Selenium	39.9	2.7	0.33	mg/kg dry	43.5	<2.7	91.8	75-125			
Silver	4.21	0.55	0.045	mg/kg dry	4.35	<0.55	96.9	75-125			

Matrix Spike Dup (B0G1703-MSD1)

Source: 2002758-01

Prepared: 07/17/20 Analyzed: 07/20/20

Arsenic	43.9	1.1	0.70	mg/kg dry	43.5	5.75	87.6	75-125	4.82	20	
Barium	178	1.1	0.051	mg/kg dry	43.5	95.7	189	75-125	18.9	20	M1

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G1703 - EPA 3050B (M)											
Matrix Spike Dup (B0G1703-MSD1)											
	Source: 2002758-01				Prepared: 07/17/20 Analyzed: 07/20/20						
Cadmium	38.5	0.055	0.012	mg/kg dry	43.5	0.415	87.4	75-125	7.25	20	
Chromium	49.8	0.55	0.022	mg/kg dry	43.5	13.7	83.1	75-125	8.14	20	
Lead	116	0.82	0.10	mg/kg dry	43.5	89.9	60.1	75-125	75.5	20	M2, QR-04
Mercury	11.9	0.55	0.19	mg/kg dry	13.6	0.737	81.9	75-125	6.23	20	
Selenium	37.3	2.7	0.33	mg/kg dry	43.5	<2.7	85.6	75-125	6.84	20	
Silver	3.99	0.55	0.045	mg/kg dry	4.35	<0.55	91.7	75-125	5.34	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1628 - EPA 3510C (Sep Funnel)

Blank (B0G1628-BLK1)

Prepared: 07/16/20 Analyzed: 07/17/20

2-Chloronaphthalene	< 10	10	0.32	ug/L							
2-Methylnaphthalene	< 10	10	0.33	ug/L							
Acenaphthene	< 10	10	0.31	ug/L							
Acenaphthylene	< 10	10	0.43	ug/L							
Anthracene	< 10	10	0.43	ug/L							
Benzo(a)anthracene	< 10	10	0.44	ug/L							
Benzo(a)pyrene	< 10	10	0.50	ug/L							
Benzo(b)fluoranthene	< 10	10	0.63	ug/L							
Benzo(g,h,i)perylene	< 10	10	1.2	ug/L							
Benzo(k)fluoranthene	< 10	10	0.49	ug/L							
Chrysene	< 10	10	0.36	ug/L							
Dibenz(a,h)anthracene	< 10	10	1.2	ug/L							
Fluoranthene	< 10	10	0.75	ug/L							
Fluorene	< 10	10	0.56	ug/L							
Indeno (1,2,3-cd) pyrene	< 10	10	1.1	ug/L							
Naphthalene	< 10	10	0.31	ug/L							
Phenanthrene	< 10	10	0.41	ug/L							
Pyrene	< 10	10	0.84	ug/L							
Surrogate: 2-Fluorobiphenyl	81.1			ug/L	100		81.1	67.5-90.8			
Surrogate: Nitrobenzene-d5	79.1			ug/L	100		79.1	57.2-94.4			
Surrogate: Terphenyl-d14	38.2			ug/L	100		38.2	30-82.6			

LCS (B0G1628-BS1)

Prepared: 07/16/20 Analyzed: 07/17/20

Acenaphthylene	41.9	10	0.43	ug/L	50.0	<10	83.8	69.1-101			
Anthracene	44.8	10	0.43	ug/L	50.0	<10	89.7	70.7-97.4			
Benzo(a)anthracene	31.9	10	0.44	ug/L	50.0	<10	63.8	65.9-95.3			QM-11
Benzo(a)pyrene	19.3	10	0.50	ug/L	50.0	<10	38.6	52.3-96.8			QM-11
Benzo(b)fluoranthene	19.0	10	0.63	ug/L	50.0	<10	38.0	54.5-96.8			QM-11
Benzo(g,h,i)perylene	19.9	10	1.2	ug/L	50.0	<10	39.8	39.9-98.4			QM-11
Benzo(k)fluoranthene	18.3	10	0.49	ug/L	50.0	<10	36.6	53.6-94.7			QM-11
Chrysene	29.5	10	0.36	ug/L	50.0	<10	58.9	65.4-94			QM-11
Dibenz(a,h)anthracene	17.9	10	1.2	ug/L	50.0	<10	35.7	38.9-94.4			QM-11
Fluoranthene	43.9	10	0.75	ug/L	50.0	<10	87.7	71.8-97.5			
Fluorene	44.0	10	0.56	ug/L	50.0	<10	88.0	74.7-100			
Indeno (1,2,3-cd) pyrene	18.1	10	1.1	ug/L	50.0	<10	36.2	38.7-97.5			QM-11
Naphthalene	42.9	10	0.31	ug/L	50.0	<10	85.8	69.4-91.3			
Phenanthrene	45.4	10	0.41	ug/L	50.0	<10	90.8	73.2-97.3			
Surrogate: 2-Fluorobiphenyl	81.4			ug/L	100		81.4	67.5-90.8			
Surrogate: Nitrobenzene-d5	77.8			ug/L	100		77.8	57.2-94.4			
Surrogate: Terphenyl-d14	47.0			ug/L	100		47.0	30-82.6			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1628 - EPA 3510C (Sep Funnel)

Matrix Spike (B0G1628-MS1)	Source: 2002715-01				Prepared: 07/16/20		Analyzed: 07/17/20				
Acenaphthylene	46.3	11	0.47	ug/L	54.3	<11	85.2	67.4-100			
Anthracene	46.6	11	0.47	ug/L	54.3	<11	85.7	68.8-95.2			
Benzo(a)anthracene	24.6	11	0.48	ug/L	54.3	<11	45.2	33.7-92.6			
Benzo(a)pyrene	12.2	11	0.54	ug/L	54.3	<11	22.4	30-90.6			QM-11
Benzo(b)fluoranthene	11.6	11	0.68	ug/L	54.3	<11	21.4	30-92.4			QM-11
Benzo(g,h,i)perylene	11.5	11	1.3	ug/L	54.3	<11	21.2	30-90.1			QM-11
Benzo(k)fluoranthene	11.5	11	0.53	ug/L	54.3	<11	21.2	30-88.5			QM-11
Chrysene	21.3	11	0.39	ug/L	54.3	<11	39.2	30-94.4			
Dibenz(a,h)anthracene	9.92	11	1.3	ug/L	54.3	<11	18.2	30-87			QM-11
Fluoranthene	42.8	11	0.82	ug/L	54.3	<11	78.7	70.5-91.9			
Fluorene	48.4	11	0.61	ug/L	54.3	<11	89.1	71.3-101			
Indeno (1,2,3-cd) pyrene	10.3	11	1.2	ug/L	54.3	<11	18.9	30-86.3			QM-11
Naphthalene	47.0	11	0.34	ug/L	54.3	<11	86.6	69.9-88.9			
Phenanthrene	47.6	11	0.45	ug/L	54.3	<11	87.7	71.5-95			
Surrogate: 2-Fluorobiphenyl	90.3			ug/L	109		83.1	67.5-90.8			
Surrogate: Nitrobenzene-d5	89.4			ug/L	109		82.3	57.2-94.4			
Surrogate: Terphenyl-d14	28.2			ug/L	109		25.9	30-82.6			S-BN

Matrix Spike Dup (B0G1628-MSD1)	Source: 2002715-01				Prepared: 07/16/20		Analyzed: 07/17/20				
Acenaphthylene	47.9	11	0.48	ug/L	56.2	<11	85.3	67.4-100	3.53	32.9	
Anthracene	49.3	11	0.48	ug/L	56.2	<11	87.7	68.8-95.2	5.68	33.6	
Benzo(a)anthracene	26.9	11	0.49	ug/L	56.2	<11	47.9	33.7-92.6	8.99	35.6	
Benzo(a)pyrene	13.8	11	0.56	ug/L	56.2	<11	24.5	30-90.6	12.2	28.3	QM-11
Benzo(b)fluoranthene	13.3	11	0.71	ug/L	56.2	<11	23.7	30-92.4	13.3	27.2	QM-11
Benzo(g,h,i)perylene	13.0	11	1.3	ug/L	56.2	<11	23.2	30-90.1	12.6	38	QM-11
Benzo(k)fluoranthene	13.1	11	0.55	ug/L	56.2	<11	23.4	30-88.5	12.9	32.8	QM-11
Chrysene	23.7	11	0.40	ug/L	56.2	<11	42.1	30-94.4	10.6	38.5	
Dibenz(a,h)anthracene	11.3	11	1.3	ug/L	56.2	<11	20.1	30-87	13.2	41.6	QM-11
Fluoranthene	46.0	11	0.84	ug/L	56.2	<11	81.8	70.5-91.9	7.17	36.8	
Fluorene	50.1	11	0.63	ug/L	56.2	<11	89.1	71.3-101	3.40	30.3	
Indeno (1,2,3-cd) pyrene	11.6	11	1.2	ug/L	56.2	<11	20.6	30-86.3	11.8	34.3	QM-11
Naphthalene	49.2	11	0.35	ug/L	56.2	<11	87.6	69.9-88.9	4.50	23.5	
Phenanthrene	50.3	11	0.46	ug/L	56.2	<11	89.5	71.5-95	5.41	31.8	
Surrogate: 2-Fluorobiphenyl	93.7			ug/L	112		83.4	67.5-90.8			
Surrogate: Nitrobenzene-d5	93.5			ug/L	112		83.3	57.2-94.4			
Surrogate: Terphenyl-d14	30.6			ug/L	112		27.3	30-82.6			S-BN

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2005 - EPA 3545A ASE Extraction

Blank (B0G2005-BLK1)

Prepared: 07/20/20 Analyzed: 07/24/20

2-Chloronaphthalene	< 0.33	0.33	0.036	mg/kg wet							
2-Methylnaphthalene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthylene	< 0.33	0.33	0.037	mg/kg wet							
Anthracene	< 0.33	0.33	0.042	mg/kg wet							
Benzo(a)anthracene	< 0.33	0.33	0.059	mg/kg wet							
Benzo(a)pyrene	< 0.33	0.33	0.036	mg/kg wet							
Benzo(b)fluoranthene	< 0.33	0.33	0.046	mg/kg wet							
Benzo(g,h,i)perylene	< 0.33	0.33	0.064	mg/kg wet							
Benzo(k)fluoranthene	< 0.33	0.33	0.037	mg/kg wet							
Chrysene	< 0.33	0.33	0.054	mg/kg wet							
Dibenz(a,h)anthracene	< 0.33	0.33	0.043	mg/kg wet							
Fluoranthene	< 0.33	0.33	0.054	mg/kg wet							
Fluorene	< 0.33	0.33	0.044	mg/kg wet							
Indeno (1,2,3-cd) pyrene	< 0.33	0.33	0.044	mg/kg wet							
Naphthalene	< 0.33	0.33	0.034	mg/kg wet							
Phenanthrene	< 0.33	0.33	0.045	mg/kg wet							
Pyrene	< 0.33	0.33	0.057	mg/kg wet							
<i>Surrogate: 2-Fluorobiphenyl</i>	5.43			mg/kg wet	6.67		81.5	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	5.27			mg/kg wet	6.67		79.1	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	6.55			mg/kg wet	6.67		98.3	36.6-110			

LCS (B0G2005-BS1)

Prepared: 07/20/20 Analyzed: 07/24/20

Acenaphthylene	2.26	0.33	0.037	mg/kg wet	3.33	<0.33	67.7	58.2-95.8			
Anthracene	2.68	0.33	0.042	mg/kg wet	3.33	<0.33	80.3	64-98.3			
Benzo(a)anthracene	2.87	0.33	0.059	mg/kg wet	3.33	<0.33	86.2	65-99.4			
Benzo(a)pyrene	2.61	0.33	0.036	mg/kg wet	3.33	<0.33	78.3	63.7-102			
Benzo(b)fluoranthene	2.72	0.33	0.046	mg/kg wet	3.33	<0.33	81.7	62-99.1			
Benzo(g,h,i)perylene	2.20	0.33	0.064	mg/kg wet	3.33	<0.33	65.9	57.3-109			
Benzo(k)fluoranthene	2.72	0.33	0.037	mg/kg wet	3.33	<0.33	81.7	62.6-101			
Chrysene	2.93	0.33	0.054	mg/kg wet	3.33	<0.33	87.9	67.5-104			
Dibenz(a,h)anthracene	2.26	0.33	0.043	mg/kg wet	3.33	<0.33	67.9	59.8-106			
Fluoranthene	3.00	0.33	0.054	mg/kg wet	3.33	<0.33	90.0	61.8-99			
Fluorene	2.58	0.33	0.044	mg/kg wet	3.33	<0.33	77.4	62.2-99			
Indeno (1,2,3-cd) pyrene	2.29	0.33	0.044	mg/kg wet	3.33	<0.33	68.6	57-110			
Naphthalene	2.24	0.33	0.034	mg/kg wet	3.33	<0.33	67.3	55.5-92.3			
Phenanthrene	2.70	0.33	0.045	mg/kg wet	3.33	<0.33	81.0	63.8-99.9			
<i>Surrogate: 2-Fluorobiphenyl</i>	5.12			mg/kg wet	6.67		76.9	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	5.45			mg/kg wet	6.67		81.8	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	6.97			mg/kg wet	6.67		105	36.6-110			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2005 - EPA 3545A ASE Extraction

Matrix Spike (B0G2005-MS1)

Source: 2002758-07

Prepared: 07/20/20 Analyzed: 07/24/20

Acenaphthylene	2.43	0.37	0.041	mg/kg dry	3.70	<0.37	65.6	37.7-105			
Anthracene	3.01	0.37	0.047	mg/kg dry	3.70	<0.37	81.4	43.2-110			
Benzo(a)anthracene	3.20	0.37	0.066	mg/kg dry	3.70	<0.37	86.3	33.3-117			
Benzo(a)pyrene	2.90	0.37	0.040	mg/kg dry	3.70	<0.37	78.2	30-120			
Benzo(b)fluoranthene	3.03	0.37	0.051	mg/kg dry	3.70	<0.37	81.7	30-123			
Benzo(g,h,i)perylene	2.46	0.37	0.071	mg/kg dry	3.70	<0.37	66.5	30-122			
Benzo(k)fluoranthene	3.04	0.37	0.041	mg/kg dry	3.70	<0.37	82.0	35.2-116			
Chrysene	3.32	0.37	0.060	mg/kg dry	3.70	<0.37	89.7	38.4-122			
Dibenz(a,h)anthracene	2.55	0.37	0.048	mg/kg dry	3.70	<0.37	68.7	30-115			
Fluoranthene	3.24	0.37	0.060	mg/kg dry	3.70	<0.37	87.3	30-133			
Fluorene	2.82	0.37	0.049	mg/kg dry	3.70	<0.37	76.0	41.4-109			
Indeno (1,2,3-cd) pyrene	2.50	0.37	0.049	mg/kg dry	3.70	<0.37	67.5	30-119			
Naphthalene	2.53	0.37	0.038	mg/kg dry	3.70	<0.37	68.3	32-104			
Phenanthrene	3.02	0.37	0.050	mg/kg dry	3.70	<0.37	81.7	30-128			
Surrogate: 2-Fluorobiphenyl	5.58			mg/kg dry	7.41		75.3	54.8-85.5			
Surrogate: Nitrobenzene-d5	6.10			mg/kg dry	7.41		82.4	50.7-84.5			
Surrogate: Terphenyl-d14	7.64			mg/kg dry	7.41		103	36.6-110			

Matrix Spike Dup (B0G2005-MSD1)

Source: 2002758-07

Prepared: 07/20/20 Analyzed: 07/24/20

Acenaphthylene	2.60	0.37	0.041	mg/kg dry	3.70	<0.37	70.3	37.7-105	7.01	25.7	
Anthracene	2.93	0.37	0.047	mg/kg dry	3.70	<0.37	79.2	43.2-110	2.76	24.6	
Benzo(a)anthracene	3.12	0.37	0.066	mg/kg dry	3.70	<0.37	84.1	33.3-117	2.53	24.4	
Benzo(a)pyrene	2.77	0.37	0.040	mg/kg dry	3.70	<0.37	74.8	30-120	4.49	24.1	
Benzo(b)fluoranthene	2.89	0.37	0.051	mg/kg dry	3.70	<0.37	77.9	30-123	4.75	25.7	
Benzo(g,h,i)perylene	2.36	0.37	0.071	mg/kg dry	3.70	<0.37	63.8	30-122	4.14	26.4	
Benzo(k)fluoranthene	2.95	0.37	0.041	mg/kg dry	3.70	<0.37	79.5	35.2-116	3.01	24.8	
Chrysene	3.17	0.37	0.060	mg/kg dry	3.70	<0.37	85.5	38.4-122	4.73	25.7	
Dibenz(a,h)anthracene	2.43	0.37	0.048	mg/kg dry	3.70	<0.37	65.6	30-115	4.59	25.4	
Fluoranthene	3.08	0.37	0.060	mg/kg dry	3.70	<0.37	83.0	30-133	5.06	28	
Fluorene	2.92	0.37	0.049	mg/kg dry	3.70	<0.37	78.9	41.4-109	3.74	25	
Indeno (1,2,3-cd) pyrene	2.42	0.37	0.049	mg/kg dry	3.70	<0.37	65.3	30-119	3.36	24.5	
Naphthalene	2.58	0.37	0.038	mg/kg dry	3.70	<0.37	69.8	32-104	2.14	33.3	
Phenanthrene	2.94	0.37	0.050	mg/kg dry	3.70	<0.37	79.4	30-128	2.78	29.9	
Surrogate: 2-Fluorobiphenyl	5.79			mg/kg dry	7.41		78.2	54.8-85.5			
Surrogate: Nitrobenzene-d5	6.16			mg/kg dry	7.41		83.1	50.7-84.5			
Surrogate: Terphenyl-d14	7.40			mg/kg dry	7.41		99.9	36.6-110			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2311 - General Preparation											
Duplicate (B0G2311-DUP1)											
Source: 2002826-01 Prepared & Analyzed: 07/23/20											
% Solids	90.0			%		90.0			0.00	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

Blank (B0G1726-BLK1)

Prepared & Analyzed: 07/17/20

1,1,1,2-Tetrachloroethane	< 1.0	1.0	0.13	ug/L							
1,1,1-Trichloroethane	< 1.0	1.0	0.060	ug/L							
1,1,2,2-Tetrachloroethane	< 1.0	1.0	0.053	ug/L							
1,1,2-Trichloroethane	< 1.0	1.0	0.11	ug/L							
1,1,2-Trichlorotrifluoroethane	< 1.0	1.0	0.094	ug/L							
1,1-Dichloroethane	< 1.0	1.0	0.066	ug/L							
1,1-Dichloroethene	< 1.0	1.0	0.22	ug/L							
1,1-Dichloropropene	< 1.0	1.0	0.096	ug/L							
1,2,3-Trichlorobenzene	< 5.0	5.0	0.53	ug/L							
1,2,3-Trichloropropane	< 2.5	2.5	0.053	ug/L							
1,2,4-Trichlorobenzene	< 5.0	5.0	0.63	ug/L							
1,2,4-Trimethylbenzene	< 1.0	1.0	0.15	ug/L							
1,2-Dibromo-3-chloropropane	< 5.0	5.0	0.24	ug/L							
1,2-Dibromoethane (EDB)	< 2.5	2.5	0.18	ug/L							
1,2-Dichlorobenzene	< 1.0	1.0	0.33	ug/L							
1,2-Dichloroethane	< 1.0	1.0	0.13	ug/L							
1,2-Dichloropropane	< 1.0	1.0	0.067	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.12	ug/L							
1,3-Dichlorobenzene	< 1.0	1.0	0.43	ug/L							
1,3-Dichloropropane	< 1.0	1.0	0.10	ug/L							
1,4-Dichlorobenzene	< 1.0	1.0	0.49	ug/L							
2,2-Dichloropropane	< 5.0	5.0	0.089	ug/L							
2-Butanone	< 20	20	2.1	ug/L							
2-Chlorotoluene	< 1.0	1.0	0.18	ug/L							
4-Chlorotoluene	< 1.0	1.0	0.32	ug/L							
Acetone	< 20	20	5.0	ug/L							
Allyl chloride	< 5.0	5.0	0.19	ug/L							
Benzene	< 1.0	1.0	0.059	ug/L							
Bromobenzene	< 1.0	1.0	0.22	ug/L							
Bromochloromethane	< 1.0	1.0	0.23	ug/L							
Bromodichloromethane	< 1.0	1.0	0.081	ug/L							
Bromoform	< 5.0	5.0	0.11	ug/L							
Bromomethane	< 5.0	5.0	0.11	ug/L							
Carbon tetrachloride	< 1.0	1.0	0.054	ug/L							
Chlorobenzene	< 1.0	1.0	0.24	ug/L							
Chloroethane	< 2.5	2.5	0.075	ug/L							
Chloroform	< 1.0	1.0	0.36	ug/L							
Chloromethane	< 2.5	2.5	0.097	ug/L							
cis-1,2-Dichloroethene	< 1.0	1.0	0.22	ug/L							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

Blank (B0G1726-BLK1)

Prepared & Analyzed: 07/17/20

cis-1,3-Dichloropropene	< 1.0	1.0	0.23	ug/L							
Dibromochloromethane	< 2.5	2.5	0.10	ug/L							
Dibromomethane	< 2.5	2.5	0.19	ug/L							
Dichlorodifluoromethane	< 5.0	5.0	0.062	ug/L							
Dichlorofluoromethane	< 1.0	1.0	0.046	ug/L							
Ethyl ether	< 5.0	5.0	0.039	ug/L							
Ethylbenzene	< 1.0	1.0	0.14	ug/L							
Hexachlorobutadiene	< 10	10	0.27	ug/L							
Isopropylbenzene	< 1.0	1.0	0.57	ug/L							
m,p-Xylene	< 2.0	2.0	0.29	ug/L							
Methyl isobutyl ketone	< 5.0	5.0	0.063	ug/L							
Methyl tert-butyl ether	< 1.0	1.0	0.051	ug/L							
Methylene chloride	< 5.0	5.0	0.98	ug/L							
Naphthalene	< 5.0	5.0	0.34	ug/L							
n-Butylbenzene	< 2.5	2.5	0.36	ug/L							
n-Propylbenzene	< 1.0	1.0	0.18	ug/L							
o-Xylene	< 1.0	1.0	0.76	ug/L							
p-Isopropyltoluene	< 2.5	2.5	0.12	ug/L							
sec-Butylbenzene	< 1.0	1.0	0.11	ug/L							
Styrene	< 1.0	1.0	0.21	ug/L							
tert-Butylbenzene	< 1.0	1.0	0.063	ug/L							
Tetrachloroethene	< 1.0	1.0	0.10	ug/L							
Tetrahydrofuran	< 20	20	1.5	ug/L							
Toluene	< 1.0	1.0	0.10	ug/L							
trans-1,2-Dichloroethene	< 1.0	1.0	0.26	ug/L							
trans-1,3-Dichloropropene	< 1.0	1.0	0.22	ug/L							
Trichloroethene	< 1.0	1.0	0.54	ug/L							
Trichlorofluoromethane	< 1.0	1.0	0.073	ug/L							
Vinyl chloride	< 1.0	1.0	0.064	ug/L							
Surrogate: 4-Bromofluorobenzene	49.0			ug/L	52.4		93.4	80-120			
Surrogate: Dibromofluoromethane	46.3			ug/L	52.4		88.3	80-120			
Surrogate: Toluene-d8	47.0			ug/L	52.4		89.7	80-120			

LCS (B0G1726-BS1)

Prepared & Analyzed: 07/17/20

1,1,1,2-Tetrachloroethane	40.6	1.0	0.13	ug/L	47.0	<1.0	86.4	80-120			
1,1,1-Trichloroethane	47.4	1.0	0.060	ug/L	47.0	<1.0	101	80-120			
1,1,2,2-Tetrachloroethane	46.0	1.0	0.053	ug/L	47.0	<1.0	97.9	77.6-121			
1,1,2-Trichloroethane	46.6	1.0	0.11	ug/L	47.0	<1.0	99.1	80-120			
1,1,2-Trichlorotrifluoroethane	47.6	1.0	0.094	ug/L	47.0	<1.0	101	80-120			
1,1-Dichloroethane	48.4	1.0	0.066	ug/L	47.0	<1.0	103	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

LCS (B0G1726-BS1)

Prepared & Analyzed: 07/17/20

1,1-Dichloroethene	49.2	1.0	0.22	ug/L	47.0	<1.0	105	80-120			
1,1-Dichloropropene	46.9	1.0	0.096	ug/L	47.0	<1.0	99.8	80-120			
1,2,3-Trichlorobenzene	37.0	5.0	0.53	ug/L	47.0	<5.0	78.8	70-130			
1,2,3-Trichloropropane	45.0	2.5	0.053	ug/L	47.0	<2.5	95.7	76.7-120			
1,2,4-Trichlorobenzene	37.6	5.0	0.63	ug/L	47.0	<5.0	80.0	70-130			
1,2,4-Trimethylbenzene	45.3	1.0	0.15	ug/L	47.0	<1.0	96.4	80-120			
1,2-Dibromo-3-chloropropane	42.6	5.0	0.24	ug/L	47.0	<5.0	90.7	75-125			
1,2-Dibromoethane (EDB)	41.6	2.5	0.18	ug/L	47.0	<2.5	88.4	80-120			
1,2-Dichlorobenzene	41.5	1.0	0.33	ug/L	47.0	<1.0	88.2	75-125			
1,2-Dichloroethane	43.7	1.0	0.13	ug/L	47.0	<1.0	93.0	78.2-120			
1,2-Dichloropropane	46.6	1.0	0.067	ug/L	47.0	<1.0	99.1	80-120			
1,3,5-Trimethylbenzene	45.7	1.0	0.12	ug/L	47.0	<1.0	97.3	80-120			
1,3-Dichlorobenzene	42.0	1.0	0.43	ug/L	47.0	<1.0	89.3	75-125			
1,3-Dichloropropane	42.3	1.0	0.10	ug/L	47.0	<1.0	89.9	80-120			
1,4-Dichlorobenzene	39.5	1.0	0.49	ug/L	47.0	<1.0	84.1	75-125			
2,2-Dichloropropane	52.1	5.0	0.089	ug/L	47.0	<5.0	111	70-136			
2-Butanone	47.5	20	2.1	ug/L	47.0	<20	101	75-125			
2-Chlorotoluene	45.0	1.0	0.18	ug/L	47.0	<1.0	95.8	80-120			
4-Chlorotoluene	44.3	1.0	0.32	ug/L	47.0	<1.0	94.2	80-120			
Acetone	46.3	20	5.0	ug/L	47.0	<20	98.4	75-125			
Allyl chloride	47.6	5.0	0.19	ug/L	47.0	<5.0	101	77-121			
Benzene	45.6	1.0	0.059	ug/L	47.0	<1.0	97.0	80-120			
Bromobenzene	44.5	1.0	0.22	ug/L	47.0	<1.0	94.6	80-120			
Bromochloromethane	47.3	1.0	0.23	ug/L	47.0	<1.0	101	80-120			
Bromodichloromethane	45.4	1.0	0.081	ug/L	47.0	<1.0	96.5	80-120			
Bromoform	41.2	5.0	0.11	ug/L	47.0	<5.0	87.6	79.7-120			
Bromomethane	40.8	5.0	0.11	ug/L	47.0	<5.0	86.8	75-129			
Carbon tetrachloride	47.8	1.0	0.054	ug/L	47.0	<1.0	102	80-120			
Chlorobenzene	40.3	1.0	0.24	ug/L	47.0	<1.0	85.8	80-120			
Chloroethane	42.2	2.5	0.075	ug/L	47.0	<2.5	89.8	75-125			
Chloroform	48.5	1.0	0.36	ug/L	47.0	<1.0	103	80-120			
Chloromethane	41.2	2.5	0.097	ug/L	47.0	<2.5	87.8	75-130			
cis-1,2-Dichloroethene	46.9	1.0	0.22	ug/L	47.0	<1.0	99.8	80-120			
cis-1,3-Dichloropropene	46.3	1.0	0.23	ug/L	47.0	<1.0	98.5	80-120			
Dibromochloromethane	41.7	2.5	0.10	ug/L	47.0	<2.5	88.8	80-120			
Dibromomethane	44.8	2.5	0.19	ug/L	47.0	<2.5	95.2	80-120			
Dichlorodifluoromethane	40.8	5.0	0.062	ug/L	47.0	<5.0	86.9	70-128			
Dichlorofluoromethane	44.0	1.0	0.046	ug/L	47.0	<1.0	93.6	75-125			
Ethyl ether	43.9	5.0	0.039	ug/L	47.0	<5.0	93.4	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

LCS (B0G1726-BS1)

Prepared & Analyzed: 07/17/20

Ethylbenzene	42.6	1.0	0.14	ug/L	47.0	<1.0	90.6	80-120			
Hexachlorobutadiene	40.3	10	0.27	ug/L	47.0	<10	85.7	70-130			
Isopropylbenzene	47.4	1.0	0.57	ug/L	47.0	<1.0	101	78.9-120			
m,p-Xylene	83.4	2.0	0.29	ug/L	94.0	<2.0	88.7	80-120			
Methyl isobutyl ketone	49.6	5.0	0.063	ug/L	47.0	<5.0	106	80-120			
Methyl tert-butyl ether	50.0	1.0	0.051	ug/L	47.0	<1.0	106	80-120			
Methylene chloride	44.4	5.0	0.98	ug/L	47.0	<5.0	94.5	79.2-120			
Naphthalene	42.5	5.0	0.34	ug/L	47.0	<5.0	90.4	70-126			
n-Butylbenzene	44.1	2.5	0.36	ug/L	47.0	<2.5	93.9	75-125			
n-Propylbenzene	46.8	1.0	0.18	ug/L	47.0	<1.0	99.5	80-120			
o-Xylene	42.4	1.0	0.76	ug/L	47.0	<1.0	90.3	80-120			
p-Isopropyltoluene	43.8	2.5	0.12	ug/L	47.0	<2.5	93.3	75-125			
sec-Butylbenzene	44.5	1.0	0.11	ug/L	47.0	<1.0	94.7	75-125			
Styrene	42.0	1.0	0.21	ug/L	47.0	<1.0	89.3	80-120			
tert-Butylbenzene	45.8	1.0	0.063	ug/L	47.0	<1.0	97.3	80-120			
Tetrachloroethene	44.5	1.0	0.10	ug/L	47.0	<1.0	94.6	80-120			
Tetrahydrofuran	51.0	20	1.5	ug/L	47.0	<20	108	75-125			
Toluene	46.2	1.0	0.10	ug/L	47.0	<1.0	98.3	80-120			
trans-1,2-Dichloroethene	46.1	1.0	0.26	ug/L	47.0	<1.0	98.0	80-120			
trans-1,3-Dichloropropene	45.8	1.0	0.22	ug/L	47.0	<1.0	97.5	80-120			
Trichloroethene	42.3	1.0	0.54	ug/L	47.0	<1.0	90.1	80-120			
Trichlorofluoromethane	42.9	1.0	0.073	ug/L	47.0	<1.0	91.2	75-128			
Vinyl chloride	43.7	1.0	0.064	ug/L	47.0	<1.0	92.9	75-130			
Surrogate: 4-Bromofluorobenzene	50.4			ug/L	52.4		96.2	80-120			
Surrogate: Dibromofluoromethane	47.3			ug/L	52.4		90.3	80-120			
Surrogate: Toluene-d8	50.4			ug/L	52.4		96.2	80-120			

Matrix Spike (B0G1726-MS1)

Source: 2002715-01

Prepared & Analyzed: 07/17/20

1,1,1,2-Tetrachloroethane	42.6	1.0	0.13	ug/L	47.0	<1.0	90.6	80-120			
1,1,1-Trichloroethane	46.7	1.0	0.060	ug/L	47.0	<1.0	99.4	80-120			
1,1,2,2-Tetrachloroethane	46.5	1.0	0.053	ug/L	47.0	<1.0	98.9	75-125			
1,1,2-Trichloroethane	47.0	1.0	0.11	ug/L	47.0	<1.0	99.9	80-120			
1,1,2-Trichlorotrifluoroethane	46.5	1.0	0.094	ug/L	47.0	<1.0	98.9	75.8-120			
1,1-Dichloroethane	46.9	1.0	0.066	ug/L	47.0	<1.0	99.7	80-120			
1,1-Dichloroethene	48.5	1.0	0.22	ug/L	47.0	<1.0	103	80-120			
1,1-Dichloropropene	45.8	1.0	0.096	ug/L	47.0	<1.0	97.4	80-120			
1,2,3-Trichlorobenzene	36.3	5.0	0.53	ug/L	47.0	<5.0	77.2	70-130			
1,2,3-Trichloropropane	45.5	2.5	0.053	ug/L	47.0	<2.5	96.8	75-122			
1,2,4-Trichlorobenzene	38.2	5.0	0.63	ug/L	47.0	<5.0	81.3	70-130			
1,2,4-Trimethylbenzene	46.6	1.0	0.15	ug/L	47.0	<1.0	99.2	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

Matrix Spike (B0G1726-MS1)

Source: 2002715-01

Prepared & Analyzed: 07/17/20

1,2-Dibromo-3-chloropropane	40.1	5.0	0.24	ug/L	47.0	<5.0	85.4	74.5-122			
1,2-Dibromoethane (EDB)	42.6	2.5	0.18	ug/L	47.0	<2.5	90.7	80-120			
1,2-Dichlorobenzene	42.3	1.0	0.33	ug/L	47.0	<1.0	89.9	75-125			
1,2-Dichloroethane	44.3	1.0	0.13	ug/L	47.0	<1.0	94.2	78.6-122			
1,2-Dichloropropane	46.7	1.0	0.067	ug/L	47.0	<1.0	99.3	80-120			
1,3,5-Trimethylbenzene	46.8	1.0	0.12	ug/L	47.0	<1.0	99.5	80-120			
1,3-Dichlorobenzene	42.1	1.0	0.43	ug/L	47.0	<1.0	89.6	75-125			
1,3-Dichloropropane	44.2	1.0	0.10	ug/L	47.0	<1.0	94.0	80-120			
1,4-Dichlorobenzene	40.4	1.0	0.49	ug/L	47.0	<1.0	86.0	75-125			
2,2-Dichloropropane	52.6	5.0	0.089	ug/L	47.0	<5.0	112	65.9-140			
2-Butanone	35.4	20	2.1	ug/L	47.0	<20	75.3	75-125			
2-Chlorotoluene	45.7	1.0	0.18	ug/L	47.0	<1.0	97.2	75-124			
4-Chlorotoluene	45.4	1.0	0.32	ug/L	47.0	<1.0	96.7	79.5-120			
Acetone	26.8	20	5.0	ug/L	47.0	<20	57.1	75-125			M2
Allyl chloride	46.1	5.0	0.19	ug/L	47.0	<5.0	98.1	75-121			
Benzene	46.6	1.0	0.059	ug/L	47.0	<1.0	99.2	80-120			
Bromobenzene	44.4	1.0	0.22	ug/L	47.0	<1.0	94.5	78.7-120			
Bromochloromethane	45.6	1.0	0.23	ug/L	47.0	<1.0	97.0	75-120			
Bromodichloromethane	45.9	1.0	0.081	ug/L	47.0	<1.0	97.8	80-120			
Bromoform	42.9	5.0	0.11	ug/L	47.0	<5.0	91.2	78-122			
Bromomethane	37.3	5.0	0.11	ug/L	47.0	<5.0	79.3	75-130			
Carbon tetrachloride	47.2	1.0	0.054	ug/L	47.0	<1.0	100	79.2-120			
Chlorobenzene	42.3	1.0	0.24	ug/L	47.0	<1.0	90.0	80-120			
Chloroethane	39.2	2.5	0.075	ug/L	47.0	<2.5	83.4	75-128			
Chloroform	47.3	1.0	0.36	ug/L	47.0	<1.0	101	80-120			
Chloromethane	35.2	2.5	0.097	ug/L	47.0	<2.5	74.9	71.8-130			
cis-1,2-Dichloroethene	46.2	1.0	0.22	ug/L	47.0	<1.0	98.4	80-120			
cis-1,3-Dichloropropene	47.3	1.0	0.23	ug/L	47.0	<1.0	101	80-120			
Dibromochloromethane	42.8	2.5	0.10	ug/L	47.0	<2.5	91.0	80-120			
Dibromomethane	45.3	2.5	0.19	ug/L	47.0	<2.5	96.5	80-120			
Dichlorodifluoromethane	39.3	5.0	0.062	ug/L	47.0	<5.0	83.7	70-125			
Dichlorofluoromethane	41.0	1.0	0.046	ug/L	47.0	<1.0	87.1	75-130			
Ethyl ether	43.2	5.0	0.039	ug/L	47.0	<5.0	91.9	80-120			
Ethylbenzene	44.4	1.0	0.14	ug/L	47.0	<1.0	94.5	80-120			
Hexachlorobutadiene	39.3	10	0.27	ug/L	47.0	<10	83.5	70-130			
Isopropylbenzene	47.7	1.0	0.57	ug/L	47.0	<1.0	101	77.4-120			
m,p-Xylene	88.1	2.0	0.29	ug/L	94.0	<2.0	93.7	79.4-120			
Methyl isobutyl ketone	48.6	5.0	0.063	ug/L	47.0	<5.0	103	80-120			
Methyl tert-butyl ether	49.6	1.0	0.051	ug/L	47.0	<1.0	105	80-120			

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

Matrix Spike (B0G1726-MS1)

Source: 2002715-01

Prepared & Analyzed: 07/17/20

Methylene chloride	43.2	5.0	0.98	ug/L	47.0	<5.0	92.0	78.4-120			
Naphthalene	42.4	5.0	0.34	ug/L	47.0	<5.0	90.1	70-125			
n-Butylbenzene	45.5	2.5	0.36	ug/L	47.0	<2.5	96.8	75-125			
n-Propylbenzene	47.1	1.0	0.18	ug/L	47.0	<1.0	100	77.4-120			
o-Xylene	44.7	1.0	0.76	ug/L	47.0	<1.0	95.0	80-120			
p-Isopropyltoluene	44.7	2.5	0.12	ug/L	47.0	<2.5	95.1	75-125			
sec-Butylbenzene	45.9	1.0	0.11	ug/L	47.0	<1.0	97.8	75-125			
Styrene	44.1	1.0	0.21	ug/L	47.0	<1.0	93.8	80-120			
tert-Butylbenzene	46.5	1.0	0.063	ug/L	47.0	<1.0	99.0	78.8-120			
Tetrachloroethene	45.4	1.0	0.10	ug/L	47.0	<1.0	96.6	80-120			
Tetrahydrofuran	46.4	20	1.5	ug/L	47.0	<20	98.7	75-125			
Toluene	47.3	1.0	0.10	ug/L	47.0	<1.0	101	80-120			
trans-1,2-Dichloroethene	44.1	1.0	0.26	ug/L	47.0	<1.0	93.8	80-120			
trans-1,3-Dichloropropene	45.9	1.0	0.22	ug/L	47.0	<1.0	97.8	80-120			
Trichloroethene	43.2	1.0	0.54	ug/L	47.0	<1.0	91.8	80-120			
Trichlorofluoromethane	42.2	1.0	0.073	ug/L	47.0	<1.0	89.8	72.9-130			
Vinyl chloride	37.5	1.0	0.064	ug/L	47.0	<1.0	79.7	75-130			
Surrogate: 4-Bromofluorobenzene	49.4			ug/L	52.4		94.3	80-120			
Surrogate: Dibromofluoromethane	45.8			ug/L	52.4		87.3	80-120			
Surrogate: Toluene-d8	48.2			ug/L	52.4		92.0	80-120			

Matrix Spike Dup (B0G1726-MSD1)

Source: 2002715-01

Prepared & Analyzed: 07/17/20

1,1,1,2-Tetrachloroethane	42.7	1.0	0.13	ug/L	47.0	<1.0	90.7	80-120	0.143	20	
1,1,1-Trichloroethane	46.2	1.0	0.060	ug/L	47.0	<1.0	98.2	80-120	1.18	20	
1,1,2,2-Tetrachloroethane	46.7	1.0	0.053	ug/L	47.0	<1.0	99.4	75-125	0.473	20	
1,1,2-Trichloroethane	45.7	1.0	0.11	ug/L	47.0	<1.0	97.2	80-120	2.78	20	
1,1,2-Trichlorotrifluoroethane	45.6	1.0	0.094	ug/L	47.0	<1.0	96.9	75.8-120	2.03	20	
1,1-Dichloroethane	46.9	1.0	0.066	ug/L	47.0	<1.0	99.8	80-120	0.133	20	
1,1-Dichloroethene	45.8	1.0	0.22	ug/L	47.0	<1.0	97.4	80-120	5.82	20	
1,1-Dichloropropene	45.1	1.0	0.096	ug/L	47.0	<1.0	96.0	80-120	1.41	20	
1,2,3-Trichlorobenzene	36.0	5.0	0.53	ug/L	47.0	<5.0	76.6	70-130	0.821	25	
1,2,3-Trichloropropane	45.0	2.5	0.053	ug/L	47.0	<2.5	95.7	75-122	1.13	20	
1,2,4-Trichlorobenzene	36.7	5.0	0.63	ug/L	47.0	<5.0	78.0	70-130	4.15	25	
1,2,4-Trimethylbenzene	46.3	1.0	0.15	ug/L	47.0	<1.0	98.4	80-120	0.791	20	
1,2-Dibromo-3-chloropropane	42.3	5.0	0.24	ug/L	47.0	<5.0	90.0	74.5-122	5.29	20	
1,2-Dibromoethane (EDB)	42.7	2.5	0.18	ug/L	47.0	<2.5	90.9	80-120	0.175	20	
1,2-Dichlorobenzene	42.7	1.0	0.33	ug/L	47.0	<1.0	90.8	75-125	0.925	20	
1,2-Dichloroethane	44.3	1.0	0.13	ug/L	47.0	<1.0	94.3	78.6-122	0.0499	20	
1,2-Dichloropropane	45.9	1.0	0.067	ug/L	47.0	<1.0	97.7	80-120	1.55	20	
1,3,5-Trimethylbenzene	46.6	1.0	0.12	ug/L	47.0	<1.0	99.2	80-120	0.304	20	

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G1726 - EPA 5030C Water (Purge and Trap)

Matrix Spike Dup (B0G1726-MSD1)

Source: 2002715-01

Prepared & Analyzed: 07/17/20

1,3-Dichlorobenzene	42.7	1.0	0.43	ug/L	47.0	<1.0	90.7	75-125	1.28	20	
1,3-Dichloropropane	43.4	1.0	0.10	ug/L	47.0	<1.0	92.4	80-120	1.74	20	
1,4-Dichlorobenzene	40.8	1.0	0.49	ug/L	47.0	<1.0	86.7	75-125	0.864	20	
2,2-Dichloropropane	51.3	5.0	0.089	ug/L	47.0	<5.0	109	65.9-140	2.57	20	
2-Butanone	35.7	20	2.1	ug/L	47.0	<20	76.0	75-125	0.950	20	
2-Chlorotoluene	46.0	1.0	0.18	ug/L	47.0	<1.0	97.9	75-124	0.747	20	
4-Chlorotoluene	45.0	1.0	0.32	ug/L	47.0	<1.0	95.7	79.5-120	1.05	20	
Acetone	27.2	20	5.0	ug/L	47.0	<20	57.9	75-125	1.40	25	M2
Allyl chloride	45.6	5.0	0.19	ug/L	47.0	<5.0	97.1	75-121	0.994	20	
Benzene	45.5	1.0	0.059	ug/L	47.0	<1.0	96.9	80-120	2.34	20	
Bromobenzene	45.5	1.0	0.22	ug/L	47.0	<1.0	96.7	78.7-120	2.36	20	
Bromochloromethane	45.6	1.0	0.23	ug/L	47.0	<1.0	97.0	75-120	0.0715	20	
Bromodichloromethane	45.3	1.0	0.081	ug/L	47.0	<1.0	96.3	80-120	1.51	20	
Bromoform	43.0	5.0	0.11	ug/L	47.0	<5.0	91.6	78-122	0.408	20	
Bromomethane	38.4	5.0	0.11	ug/L	47.0	<5.0	81.6	75-130	2.82	21.9	
Carbon tetrachloride	45.9	1.0	0.054	ug/L	47.0	<1.0	97.7	79.2-120	2.70	20	
Chlorobenzene	42.6	1.0	0.24	ug/L	47.0	<1.0	90.6	80-120	0.614	20	
Chloroethane	40.8	2.5	0.075	ug/L	47.0	<2.5	86.8	75-128	4.03	20	
Chloroform	46.4	1.0	0.36	ug/L	47.0	<1.0	98.7	80-120	2.03	20	
Chloromethane	39.0	2.5	0.097	ug/L	47.0	<2.5	83.0	71.8-130	10.3	25	
cis-1,2-Dichloroethene	46.0	1.0	0.22	ug/L	47.0	<1.0	97.8	80-120	0.606	20	
cis-1,3-Dichloropropene	45.7	1.0	0.23	ug/L	47.0	<1.0	97.2	80-120	3.43	20	
Dibromochloromethane	43.2	2.5	0.10	ug/L	47.0	<2.5	91.9	80-120	0.918	20	
Dibromomethane	44.3	2.5	0.19	ug/L	47.0	<2.5	94.2	80-120	2.39	20	
Dichlorodifluoromethane	36.7	5.0	0.062	ug/L	47.0	<5.0	78.0	70-125	7.03	20	
Dichlorofluoromethane	41.4	1.0	0.046	ug/L	47.0	<1.0	88.0	75-130	0.998	20	
Ethyl ether	42.9	5.0	0.039	ug/L	47.0	<5.0	91.3	80-120	0.724	20	
Ethylbenzene	44.6	1.0	0.14	ug/L	47.0	<1.0	94.8	80-120	0.348	20	
Hexachlorobutadiene	42.2	10	0.27	ug/L	47.0	<10	89.8	70-130	7.29	25	
Isopropylbenzene	47.7	1.0	0.57	ug/L	47.0	<1.0	101	77.4-120	0.0726	20	
m,p-Xylene	87.8	2.0	0.29	ug/L	94.0	<2.0	93.4	79.4-120	0.342	20	
Methyl isobutyl ketone	47.9	5.0	0.063	ug/L	47.0	<5.0	102	80-120	1.49	20	
Methyl tert-butyl ether	48.7	1.0	0.051	ug/L	47.0	<1.0	104	80-120	1.67	20	
Methylene chloride	42.0	5.0	0.98	ug/L	47.0	<5.0	89.4	78.4-120	2.84	20	
Naphthalene	42.0	5.0	0.34	ug/L	47.0	<5.0	89.4	70-125	0.758	22.9	
n-Butylbenzene	45.9	2.5	0.36	ug/L	47.0	<2.5	97.6	75-125	0.808	20	
n-Propylbenzene	46.7	1.0	0.18	ug/L	47.0	<1.0	99.3	77.4-120	1.00	20	
o-Xylene	45.4	1.0	0.76	ug/L	47.0	<1.0	96.5	80-120	1.60	20	
p-Isopropyltoluene	45.3	2.5	0.12	ug/L	47.0	<2.5	96.4	75-125	1.35	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G1726 - EPA 5030C Water (Purge and Trap)											
Matrix Spike Dup (B0G1726-MSD1)			Source: 2002715-01			Prepared & Analyzed: 07/17/20					
sec-Butylbenzene	46.8	1.0	0.11	ug/L	47.0	<1.0	99.7	75-125	1.95	20	
Styrene	44.6	1.0	0.21	ug/L	47.0	<1.0	94.9	80-120	1.21	20	
tert-Butylbenzene	47.2	1.0	0.063	ug/L	47.0	<1.0	100	78.8-120	1.46	20	
Tetrachloroethene	44.2	1.0	0.10	ug/L	47.0	<1.0	94.0	80-120	2.71	20	
Tetrahydrofuran	47.4	20	1.5	ug/L	47.0	<20	101	75-125	2.14	20	
Toluene	46.3	1.0	0.10	ug/L	47.0	<1.0	98.6	80-120	2.17	20	
trans-1,2-Dichloroethene	44.0	1.0	0.26	ug/L	47.0	<1.0	93.5	80-120	0.275	20	
trans-1,3-Dichloropropene	44.8	1.0	0.22	ug/L	47.0	<1.0	95.3	80-120	2.58	20	
Trichloroethene	41.9	1.0	0.54	ug/L	47.0	<1.0	89.2	80-120	2.87	20	
Trichlorofluoromethane	41.9	1.0	0.073	ug/L	47.0	<1.0	89.3	72.9-130	0.650	20	
Vinyl chloride	40.5	1.0	0.064	ug/L	47.0	<1.0	86.2	75-130	7.87	20	
Surrogate: 4-Bromofluorobenzene	49.4			ug/L	52.4		94.4	80-120			
Surrogate: Dibromofluoromethane	45.1			ug/L	52.4		86.0	80-120			
Surrogate: Toluene-d8	48.5			ug/L	52.4		92.6	80-120			

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Blank (B0G2414-BLK1)	Prepared & Analyzed: 07/18/20										
1,1,1,2-Tetrachloroethane	< 0.20	0.20	0.011	mg/kg wet							
1,1,1-Trichloroethane	< 0.20	0.20	0.019	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.20	0.20	0.014	mg/kg wet							
1,1,2-Trichloroethane	< 0.20	0.20	0.016	mg/kg wet							
1,1,2-Trichlorotrifluoroethane	< 0.20	0.20	0.018	mg/kg wet							
1,1-Dichloroethane	< 0.20	0.20	0.0092	mg/kg wet							
1,1-Dichloroethene	< 0.20	0.20	0.0053	mg/kg wet							
1,1-Dichloropropene	< 0.20	0.20	0.013	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.50	0.50	0.031	mg/kg wet							
1,2,3-Trichloropropane	< 0.20	0.20	0.016	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.50	0.50	0.032	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.20	0.20	0.011	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.023	mg/kg wet							
1,2-Dibromoethane (EDB)	< 0.20	0.20	0.013	mg/kg wet							
1,2-Dichlorobenzene	< 0.20	0.20	0.0081	mg/kg wet							
1,2-Dichloroethane	< 0.20	0.20	0.011	mg/kg wet							
1,2-Dichloropropane	< 0.20	0.20	0.0071	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.20	0.20	0.012	mg/kg wet							
1,3-Dichlorobenzene	< 0.20	0.20	0.013	mg/kg wet							
1,3-Dichloropropane	< 0.20	0.20	0.0090	mg/kg wet							
1,4-Dichlorobenzene	< 0.20	0.20	0.0098	mg/kg wet							
2,2-Dichloropropane	< 0.20	0.20	0.027	mg/kg wet							
2-Butanone	< 1.0	1.0	0.039	mg/kg wet							

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Blank (B0G2414-BLK1)

Prepared & Analyzed: 07/18/20

2-Chlorotoluene	< 0.20	0.20	0.0090	mg/kg wet							
4-Chlorotoluene	< 0.20	0.20	0.015	mg/kg wet							
Acetone	< 1.0	1.0	0.054	mg/kg wet							
Allyl chloride	< 0.20	0.20	0.010	mg/kg wet							
Benzene	< 0.20	0.20	0.0088	mg/kg wet							
Bromobenzene	< 0.20	0.20	0.017	mg/kg wet							
Bromochloromethane	< 0.20	0.20	0.014	mg/kg wet							
Bromodichloromethane	< 0.20	0.20	0.0086	mg/kg wet							
Bromoform	< 0.20	0.20	0.014	mg/kg wet							
Bromomethane	< 0.20	0.20	0.048	mg/kg wet							
Carbon tetrachloride	< 0.20	0.20	0.016	mg/kg wet							
Chlorobenzene	< 0.20	0.20	0.0059	mg/kg wet							
Chloroethane	< 0.20	0.20	0.019	mg/kg wet							
Chloroform	< 0.20	0.20	0.014	mg/kg wet							
Chloromethane	< 0.20	0.20	0.013	mg/kg wet							
cis-1,2-Dichloroethene	< 0.20	0.20	0.0098	mg/kg wet							
cis-1,3-Dichloropropene	< 0.20	0.20	0.016	mg/kg wet							
Dibromochloromethane	< 0.20	0.20	0.011	mg/kg wet							
Dibromomethane	< 0.20	0.20	0.019	mg/kg wet							
Dichlorodifluoromethane	< 0.20	0.20	0.026	mg/kg wet							
Dichlorofluoromethane	< 0.20	0.20	0.016	mg/kg wet							
Ethyl ether	< 0.20	0.20	0.012	mg/kg wet							
Ethylbenzene	< 0.20	0.20	0.0089	mg/kg wet							
Hexachlorobutadiene	< 0.50	0.50	0.031	mg/kg wet							
Isopropylbenzene	< 0.20	0.20	0.014	mg/kg wet							
m,p-Xylene	< 0.40	0.40	0.024	mg/kg wet							
Methyl isobutyl ketone	< 0.20	0.20	0.026	mg/kg wet							
Methyl tert-butyl ether	< 0.20	0.20	0.014	mg/kg wet							
Methylene chloride	< 0.50	0.50	0.024	mg/kg wet							
Naphthalene	< 0.50	0.50	0.030	mg/kg wet							
n-Butylbenzene	< 0.20	0.20	0.011	mg/kg wet							
n-Propylbenzene	< 0.20	0.20	0.018	mg/kg wet							
o-Xylene	< 0.20	0.20	0.0074	mg/kg wet							
p-Isopropyltoluene	< 0.20	0.20	0.0086	mg/kg wet							
sec-Butylbenzene	< 0.20	0.20	0.011	mg/kg wet							
Styrene	< 0.20	0.20	0.0053	mg/kg wet							
tert-Butylbenzene	< 0.20	0.20	0.0061	mg/kg wet							
Tetrachloroethene	< 0.20	0.20	0.010	mg/kg wet							
Tetrahydrofuran	< 1.0	1.0	0.096	mg/kg wet							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Blank (B0G2414-BLK1)

Prepared & Analyzed: 07/18/20

Toluene	< 0.20	0.20	0.0085	mg/kg wet							
trans-1,2-Dichloroethene	< 0.20	0.20	0.012	mg/kg wet							
trans-1,3-Dichloropropene	< 0.20	0.20	0.010	mg/kg wet							
Trichloroethene	< 0.20	0.20	0.0034	mg/kg wet							
Trichlorofluoromethane	< 0.20	0.20	0.016	mg/kg wet							
Vinyl chloride	< 0.20	0.20	0.024	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	44.3			ug/L	52.4		84.6	80-120			
Surrogate: Dibromofluoromethane	45.0			ug/L	52.4		85.8	80-120			
Surrogate: Toluene-d8	46.6			ug/L	52.4		88.9	80-120			

LCS (B0G2414-BS1)

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	44.3			ug/L	47.0		94.2	80-120			
1,1,1-Trichloroethane	46.4			ug/L	47.0		98.7	80-120			
1,1,2,2-Tetrachloroethane	49.6			ug/L	47.0		106	75-125			
1,1,2-Trichloroethane	47.0			ug/L	47.0		100	80-120			
1,1,2-Trichlorotrifluoroethane	45.4			ug/L	47.0		96.6	80-120			
1,1-Dichloroethane	47.7			ug/L	47.0		102	80-120			
1,1-Dichloroethene	47.8			ug/L	47.0		102	80-120			
1,1-Dichloropropene	46.6			ug/L	47.0		99.2	80-120			
1,2,3-Trichlorobenzene	40.2			ug/L	47.0		85.4	70-130			
1,2,3-Trichloropropane	48.1			ug/L	47.0		102	75-125			
1,2,4-Trichlorobenzene	41.4			ug/L	47.0		88.1	70-130			
1,2,4-Trimethylbenzene	47.8			ug/L	47.0		102	80-120			
1,2-Dibromo-3-chloropropane	45.8			ug/L	47.0		97.5	72.9-128			
1,2-Dibromoethane (EDB)	43.8			ug/L	47.0		93.1	80-120			
1,2-Dichlorobenzene	43.4			ug/L	47.0		92.2	75-125			
1,2-Dichloroethane	45.5			ug/L	47.0		96.8	77.7-121			
1,2-Dichloropropane	46.2			ug/L	47.0		98.4	80-120			
1,3,5-Trimethylbenzene	47.7			ug/L	47.0		101	80-120			
1,3-Dichlorobenzene	43.5			ug/L	47.0		92.6	75-125			
1,3-Dichloropropane	45.2			ug/L	47.0		96.2	80-120			
1,4-Dichlorobenzene	42.4			ug/L	47.0		90.1	75-125			
2,2-Dichloropropane	50.7			ug/L	47.0		108	66.6-134			
2-Butanone	43.2			ug/L	47.0		91.9	75-125			
2-Chlorotoluene	47.4			ug/L	47.0		101	78.7-120			
4-Chlorotoluene	47.4			ug/L	47.0		101	80-120			
Acetone	40.6			ug/L	47.0		86.4	75-125			
Allyl chloride	46.8			ug/L	47.0		99.5	75-125			
Benzene	46.7			ug/L	47.0		99.4	80-120			
Bromobenzene	45.7			ug/L	47.0		97.3	79.4-120			

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

LCS (B0G2414-BS1)

Prepared & Analyzed: 07/18/20

Bromochloromethane	46.5			ug/L	47.0		98.9	75.3-124			
Bromodichloromethane	46.2			ug/L	47.0		98.3	80-120			
Bromoform	45.3			ug/L	47.0		96.3	80-120			
Bromomethane	38.7			ug/L	47.0		82.3	70-130			
Carbon tetrachloride	46.9			ug/L	47.0		99.9	80-120			
Chlorobenzene	43.7			ug/L	47.0		93.1	80-120			
Chloroethane	39.7			ug/L	47.0		84.4	75-125			
Chloroform	46.6			ug/L	47.0		99.1	80-120			
Chloromethane	38.5			ug/L	47.0		81.9	75-130			
cis-1,2-Dichloroethene	45.8			ug/L	47.0		97.5	80-120			
cis-1,3-Dichloropropene	47.0			ug/L	47.0		100	80-120			
Dibromochloromethane	44.5			ug/L	47.0		94.7	80-120			
Dibromomethane	45.7			ug/L	47.0		97.3	80-120			
Dichlorodifluoromethane	36.7			ug/L	47.0		78.1	70-130			
Dichlorofluoromethane	41.8			ug/L	47.0		89.0	74-125			
Ethyl ether	45.6			ug/L	47.0		96.9	77.9-123			
Ethylbenzene	45.8			ug/L	47.0		97.4	80-120			
Hexachlorobutadiene	44.4			ug/L	47.0		94.5	70-130			
Isopropylbenzene	50.3			ug/L	47.0		107	75.9-120			
m,p-Xylene	91.6			ug/L	94.1		97.4	80-120			
Methyl isobutyl ketone	49.3			ug/L	47.0		105	76.6-124			
Methyl tert-butyl ether	48.7			ug/L	47.0		104	80-120			
Methylene chloride	44.1			ug/L	47.0		93.9	75-120			
Naphthalene	44.6			ug/L	47.0		94.9	70-128			
n-Butylbenzene	48.1			ug/L	47.0		102	75-125			
n-Propylbenzene	48.7			ug/L	47.0		104	77.7-120			
o-Xylene	45.9			ug/L	47.0		97.6	80-120			
p-Isopropyltoluene	47.0			ug/L	47.0		100	75-125			
sec-Butylbenzene	48.7			ug/L	47.0		104	75-125			
Styrene	45.6			ug/L	47.0		97.0	80-120			
tert-Butylbenzene	48.7			ug/L	47.0		104	79.8-120			
Tetrachloroethene	43.6			ug/L	47.0		92.8	80-120			
Tetrahydrofuran	48.1			ug/L	47.0		102	75-125			
Toluene	46.8			ug/L	47.0		99.6	80-120			
trans-1,2-Dichloroethene	44.3			ug/L	47.0		94.4	79.8-120			
trans-1,3-Dichloropropene	45.8			ug/L	47.0		97.4	80-120			
Trichloroethene	42.9			ug/L	47.0		91.2	80-120			
Trichlorofluoromethane	41.4			ug/L	47.0		88.1	70.4-130			
Vinyl chloride	40.7			ug/L	47.0		86.6	75-130			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

LCS (B0G2414-BS1)

Prepared & Analyzed: 07/18/20

Surrogate: 4-Bromofluorobenzene	46.6			ug/L	52.4		89.0	80-120			
Surrogate: Dibromofluoromethane	44.1			ug/L	52.4		84.2	80-120			
Surrogate: Toluene-d8	46.8			ug/L	52.4		89.4	80-120			

Matrix Spike (B0G2414-MS1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	42.6			ug/L	47.0	0.00	90.7	80-120			
1,1,1-Trichloroethane	44.2			ug/L	47.0	0.00	94.0	80-120			
1,1,2,2-Tetrachloroethane	40.9			ug/L	47.0	0.00	87.1	75-125			
1,1,2-Trichloroethane	44.2			ug/L	47.0	0.00	94.1	80-120			
1,1,2-Trichlorotrifluoroethane	42.5			ug/L	47.0	0.00	90.4	80-120			
1,1-Dichloroethane	44.6			ug/L	47.0	0.00	94.9	80-120			
1,1-Dichloroethene	44.3			ug/L	47.0	0.00	94.3	79.5-120			
1,1-Dichloropropene	42.7			ug/L	47.0	0.00	90.8	80-120			
1,2,3-Trichlorobenzene	35.4			ug/L	47.0	0.00	75.3	70-130			
1,2,3-Trichloropropane	41.3			ug/L	47.0	0.00	88.0	75-125			
1,2,4-Trichlorobenzene	36.9			ug/L	47.0	0.00	78.4	70-130			
1,2,4-Trimethylbenzene	44.2			ug/L	47.0	0.00	94.1	80-120			
1,2-Dibromo-3-chloropropane	38.5			ug/L	47.0	0.00	82.0	73.6-128			
1,2-Dibromoethane (EDB)	41.9			ug/L	47.0	0.00	89.1	80-120			
1,2-Dichlorobenzene	39.9			ug/L	47.0	0.00	84.9	75-125			
1,2-Dichloroethane	43.7			ug/L	47.0	0.00	92.9	80-120			
1,2-Dichloropropane	45.6			ug/L	47.0	0.00	97.0	80-120			
1,3,5-Trimethylbenzene	44.2			ug/L	47.0	0.00	94.0	80-120			
1,3-Dichlorobenzene	40.1			ug/L	47.0	0.00	85.2	75-125			
1,3-Dichloropropane	43.3			ug/L	47.0	0.00	92.1	80-120			
1,4-Dichlorobenzene	38.4			ug/L	47.0	0.00	81.8	75-125			
2,2-Dichloropropane	44.1			ug/L	47.0	0.00	93.9	60-134			
2-Butanone	33.9			ug/L	47.0	0.00	72.2	75-125			M2
2-Chlorotoluene	43.6			ug/L	47.0	0.00	92.8	78.7-120			
4-Chlorotoluene	42.0			ug/L	47.0	0.00	89.4	79.3-120			
Acetone	29.4			ug/L	47.0	0.00	62.5	75-125			M2
Allyl chloride	42.4			ug/L	47.0	0.00	90.2	75-125			
Benzene	44.7			ug/L	47.0	0.00	95.0	80-120			
Bromobenzene	41.4			ug/L	47.0	0.00	88.1	79.4-120			
Bromochloromethane	43.3			ug/L	47.0	0.00	92.1	75.8-123			
Bromodichloromethane	44.3			ug/L	47.0	0.00	94.2	80-120			
Bromoform	41.8			ug/L	47.0	0.00	89.0	80-120			
Bromomethane	34.8			ug/L	47.0	0.00	74.0	70-130			
Carbon tetrachloride	44.0			ug/L	47.0	0.00	93.7	80-120			
Chlorobenzene	42.4			ug/L	47.0	0.00	90.3	80-120			

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Matrix Spike (B0G2414-MS1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

Chloroethane	35.9			ug/L	47.0	0.00	76.4	73.8-125			
Chloroform	43.9			ug/L	47.0	0.00	93.4	80-120			
Chloromethane	33.7			ug/L	47.0	0.00	71.7	75-130			M2
cis-1,2-Dichloroethene	43.0			ug/L	47.0	0.00	91.6	80-120			
cis-1,3-Dichloropropene	44.2			ug/L	47.0	0.00	94.1	80-120			
Dibromochloromethane	41.9			ug/L	47.0	0.00	89.1	80-120			
Dibromomethane	44.2			ug/L	47.0	0.00	94.0	80-120			
Dichlorodifluoromethane	35.5			ug/L	47.0	0.00	75.6	70-130			
Dichlorofluoromethane	38.8			ug/L	47.0	0.00	82.6	73.5-127			
Ethyl ether	42.1			ug/L	47.0	0.00	89.7	77.6-124			
Ethylbenzene	44.3			ug/L	47.0	0.00	94.2	80-120			
Hexachlorobutadiene	39.1			ug/L	47.0	0.00	83.1	70-130			
Isopropylbenzene	44.5			ug/L	47.0	0.00	94.7	76.9-120			
m,p-Xylene	86.3			ug/L	94.1	0.00	91.7	80-120			
Methyl isobutyl ketone	44.3			ug/L	47.0	0.00	94.3	75.2-125			
Methyl tert-butyl ether	45.7			ug/L	47.0	0.00	97.2	80-120			
Methylene chloride	40.4			ug/L	47.0	0.00	86.0	76.7-120			
Naphthalene	39.5			ug/L	47.0	0.00	84.0	70-130			
n-Butylbenzene	42.8			ug/L	47.0	0.00	91.0	75-125			
n-Propylbenzene	43.4			ug/L	47.0	0.00	92.3	77.7-120			
o-Xylene	44.3			ug/L	47.0	0.00	94.3	80-120			
p-Isopropyltoluene	43.1			ug/L	47.0	0.00	91.8	75-125			
sec-Butylbenzene	43.7			ug/L	47.0	0.00	93.0	75-125			
Styrene	43.7			ug/L	47.0	0.00	93.0	80-120			
tert-Butylbenzene	44.5			ug/L	47.0	0.00	94.7	79.4-120			
Tetrachloroethene	42.6			ug/L	47.0	0.00	90.7	80-120			
Tetrahydrofuran	40.8			ug/L	47.0	0.00	86.8	75-125			
Toluene	45.0			ug/L	47.0	0.00	95.8	80-120			
trans-1,2-Dichloroethene	41.6			ug/L	47.0	0.00	88.5	80-120			
trans-1,3-Dichloropropene	43.3			ug/L	47.0	0.00	92.1	80-120			
Trichloroethene	42.5			ug/L	47.0	0.00	90.3	80-120			
Trichlorofluoromethane	38.9			ug/L	47.0	0.00	82.8	73.3-127			
Vinyl chloride	34.1			ug/L	47.0	0.00	72.6	75-130			M2
Surrogate: 4-Bromofluorobenzene	47.7			ug/L	52.4		91.0	80-120			
Surrogate: Dibromofluoromethane	45.9			ug/L	52.4		87.7	80-120			
Surrogate: Toluene-d8	48.1			ug/L	52.4		91.9	80-120			

Matrix Spike Dup (B0G2414-MSD1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	43.2			ug/L	47.0	0.00	91.8	80-120	1.21	20	
1,1,1-Trichloroethane	45.3			ug/L	47.0	0.00	96.3	80-120	2.42	20	

Barr Engineering Co.	Project: 23271806	
4300 MarketPointe Drive, Suite 200	Project Number: 23271806	Work Order #: 2002758
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 09/10/20

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Matrix Spike Dup (B0G2414-MSD1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,1,2,2-Tetrachloroethane	45.6			ug/L	47.0	0.00	97.0	75-125	10.7	20	
1,1,2-Trichloroethane	45.7			ug/L	47.0	0.00	97.2	80-120	3.30	20	
1,1,2-Trichlorotrifluoroethane	43.6			ug/L	47.0	0.00	92.8	80-120	2.68	20	
1,1-Dichloroethane	46.1			ug/L	47.0	0.00	98.0	80-120	3.21	20	
1,1-Dichloroethene	46.6			ug/L	47.0	0.00	99.2	79.5-120	5.09	20	
1,1-Dichloropropene	44.6			ug/L	47.0	0.00	95.0	80-120	4.48	20	
1,2,3-Trichlorobenzene	38.8			ug/L	47.0	0.00	82.6	70-130	9.22	25	
1,2,3-Trichloropropane	44.7			ug/L	47.0	0.00	95.0	75-125	7.75	20	
1,2,4-Trichlorobenzene	39.6			ug/L	47.0	0.00	84.3	70-130	7.18	25	
1,2,4-Trimethylbenzene	46.3			ug/L	47.0	0.00	98.5	80-120	4.53	20	
1,2-Dibromo-3-chloropropane	41.1			ug/L	47.0	0.00	87.5	73.6-128	6.49	20	
1,2-Dibromoethane (EDB)	43.1			ug/L	47.0	0.00	91.8	80-120	3.00	20	
1,2-Dichlorobenzene	41.9			ug/L	47.0	0.00	89.2	75-125	4.83	20	
1,2-Dichloroethane	43.7			ug/L	47.0	0.00	92.9	80-120	0.0449	20	
1,2-Dichloropropane	45.5			ug/L	47.0	0.00	96.8	80-120	0.204	20	
1,3,5-Trimethylbenzene	45.7			ug/L	47.0	0.00	97.3	80-120	3.42	20	
1,3-Dichlorobenzene	41.7			ug/L	47.0	0.00	88.8	75-125	4.08	20	
1,3-Dichloropropane	44.1			ug/L	47.0	0.00	93.8	80-120	1.78	20	
1,4-Dichlorobenzene	39.8			ug/L	47.0	0.00	84.6	75-125	3.41	20	
2,2-Dichloropropane	45.2			ug/L	47.0	0.00	96.2	60-134	2.44	20	
2-Butanone	40.2			ug/L	47.0	0.00	85.4	75-125	16.8	20	
2-Chlorotoluene	44.7			ug/L	47.0	0.00	95.2	78.7-120	2.50	20	
4-Chlorotoluene	44.6			ug/L	47.0	0.00	94.8	79.3-120	5.91	20	
Acetone	37.2			ug/L	47.0	0.00	79.2	75-125	23.5	25	
Allyl chloride	44.2			ug/L	47.0	0.00	94.0	75-125	4.13	20	
Benzene	45.3			ug/L	47.0	0.00	96.5	80-120	1.49	20	
Bromobenzene	43.9			ug/L	47.0	0.00	93.3	79.4-120	5.79	20	
Bromochloromethane	45.6			ug/L	47.0	0.00	97.0	75.8-123	5.13	20	
Bromodichloromethane	44.4			ug/L	47.0	0.00	94.5	80-120	0.301	20	
Bromoform	43.4			ug/L	47.0	0.00	92.3	80-120	3.68	20	
Bromomethane	37.0			ug/L	47.0	0.00	78.6	70-130	6.08	20	
Carbon tetrachloride	46.0			ug/L	47.0	0.00	97.8	80-120	4.32	20	
Chlorobenzene	42.4			ug/L	47.0	0.00	90.3	80-120	0.0130	20	
Chloroethane	39.4			ug/L	47.0	0.00	83.9	73.8-125	9.42	20	
Chloroform	45.8			ug/L	47.0	0.00	97.4	80-120	4.23	20	
Chloromethane	37.4			ug/L	47.0	0.00	79.5	75-130	10.3	20	
cis-1,2-Dichloroethene	45.0			ug/L	47.0	0.00	95.8	80-120	4.54	20	
cis-1,3-Dichloropropene	44.5			ug/L	47.0	0.00	94.6	80-120	0.518	20	
Dibromochloromethane	43.3			ug/L	47.0	0.00	92.2	80-120	3.38	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2414 - EPA 5035A Soil (Purge and Trap)											
Matrix Spike Dup (B0G2414-MSD1)			Source: 2002758-04			Prepared & Analyzed: 07/18/20					
Dibromomethane	43.5			ug/L	47.0	0.00	92.5	80-120	1.64	20	
Dichlorodifluoromethane	35.0			ug/L	47.0	0.00	74.5	70-130	1.38	20	
Dichlorofluoromethane	41.7			ug/L	47.0	0.00	88.8	73.5-127	7.19	20	
Ethyl ether	44.7			ug/L	47.0	0.00	95.0	77.6-124	5.79	20	
Ethylbenzene	44.8			ug/L	47.0	0.00	95.3	80-120	1.22	20	
Hexachlorobutadiene	42.7			ug/L	47.0	0.00	90.9	70-130	8.93	22	
Isopropylbenzene	46.9			ug/L	47.0	0.00	99.7	76.9-120	5.16	20	
m,p-Xylene	87.5			ug/L	94.1	0.00	93.0	80-120	1.40	20	
Methyl isobutyl ketone	46.1			ug/L	47.0	0.00	98.2	75.2-125	4.01	20	
Methyl tert-butyl ether	48.0			ug/L	47.0	0.00	102	80-120	4.92	20	
Methylene chloride	43.0			ug/L	47.0	0.00	91.4	76.7-120	6.07	20	
Naphthalene	43.4			ug/L	47.0	0.00	92.3	70-130	9.42	25	
n-Butylbenzene	44.6			ug/L	47.0	0.00	94.9	75-125	4.12	20	
n-Propylbenzene	45.8			ug/L	47.0	0.00	97.4	77.7-120	5.34	20	
o-Xylene	44.7			ug/L	47.0	0.00	95.2	80-120	0.902	20	
p-Isopropyltoluene	44.6			ug/L	47.0	0.00	94.8	75-125	3.27	20	
sec-Butylbenzene	45.4			ug/L	47.0	0.00	96.6	75-125	3.78	20	
Styrene	44.8			ug/L	47.0	0.00	95.4	80-120	2.56	20	
tert-Butylbenzene	46.3			ug/L	47.0	0.00	98.5	79.4-120	3.88	20	
Tetrachloroethene	43.6			ug/L	47.0	0.00	92.7	80-120	2.20	20	
Tetrahydrofuran	43.4			ug/L	47.0	0.00	92.3	75-125	6.09	20	
Toluene	45.2			ug/L	47.0	0.00	96.3	80-120	0.491	20	
trans-1,2-Dichloroethene	43.7			ug/L	47.0	0.00	92.9	80-120	4.87	20	
trans-1,3-Dichloropropene	43.9			ug/L	47.0	0.00	93.5	80-120	1.48	20	
Trichloroethene	42.2			ug/L	47.0	0.00	89.7	80-120	0.664	20	
Trichlorofluoromethane	40.1			ug/L	47.0	0.00	85.4	73.3-127	3.12	20	
Vinyl chloride	38.7			ug/L	47.0	0.00	82.3	75-130	12.6	20	
Surrogate: 4-Bromofluorobenzene	48.6			ug/L	52.4		92.7	80-120			
Surrogate: Dibromofluoromethane	45.9			ug/L	52.4		87.6	80-120			
Surrogate: Toluene-d8	48.2			ug/L	52.4		92.0	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002758 Date Reported: 09/10/20
---	---	--

Notes and Definitions

T5	Laboratory not licensed for this parameter.
S-BN	Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
QR-04	The RPD value for the MS/MSD was outside of QC acceptance limits. Data was accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-11	Spike recovery was outside of laboratory limits
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M1	Matrix spike recovery was high, the associated blank spike recovery was acceptable.
D-04	The hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.
<	Less than value listed
dry	Sample results reported on a dry weight basis
NA	Not applicable. The %RPD is not calculated from values less than the reporting limit.
MDL	Method Detection Limit; Equivalent to the method LOD (Limit of Detection)
RL	Reporting Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
MS	Matrix Spike = Laboratory Fortified Matrix (LFM)

BARR Barr Engineering Co. Chain of Custody **2002758**
 Sample Origination State
 CO MI MN MO ND TX UT WI Other: _____

REPORT TO		INVOICE TO	
Company: Barr Eng.	Address:	Company: Barr Eng.	Address:
Name: Andrea Nord	email: anord@barr.com	Name:	email:
Copy to: BarrDM@barr.com	Project Name: Bryn Mawr	P.O.	Barr Project No: 23271806

Analysis Requested		COC Number: No 585317
Water	Soil	COC <u>1</u> of <u>1</u>
		Matrix Code: GW = Groundwater, SW = Surface Water, WW = Waste Water, DW = Drinking Water, S = Soil/Solid, SD = Sediment, O = Other
		Preservative Code: A = None, B = HCl, C = HNO ₃ , D = H ₂ SO ₄ , E = NaOH, F = MeOH, G = NaHSO ₄ , H = Na ₂ S ₂ O ₃ , I = Ascorbic Acid, J = Zn Acetate, K = Other

Location	Sample Depth			Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform MS/MSD Y / N	Total Number Of Containers	Analysis Requested										Preservative Code	Field Filtered Y/N	
	Start	Stop	Unit (m./ft. or in.)						PRO w/SGC	PAHs	RCRA Metals	VOC	GRD	% Solids							
1. SB-04-20	0	3	ft	07/15/2020	9:00	S	N	3												01	A-C
2. SB-05-20	0	3			10:30	S	N	3												02	
3. SB-05-20	5	7			16:30	S	N	3												03	
4. SB-05-20	6	6			10:30	S	N	1												04	A
5. SB-06-20	0	3.5			11:40	S	N	3												05	AC
6. SB-07-20	5	7			13:30	S	N	4												06	A-D
7. SB-07-20																					
8. SB-07-20	14	15			13:50	S	N	3												07	A-C
9. SB-08-20	2	6			14:20	S	N	3												08	
10. SB-08-20	5	6	↓	↓	14:20	S	N	1												09	

BARR USE ONLY		Relinquished by: <i>[Signature]</i>	On Ice? <input checked="" type="checkbox"/> N	Date: 7/16	Time: 9:35	Received by: <i>[Signature]</i>	Date: 7/16/20	Time: 9:35
Sampled by: Alex Short	Barr Proj. Manager: Jenni Brekken	Barr DQ Manager: Andrea Nord	Relinquished by:	On Ice? <input type="checkbox"/> Y <input type="checkbox"/> N	Date:	Time:	Received by:	Date:
Lab Name: Legend	Lab Location: St. Paul, MN	Lab WO:	Samples Shipped VIA: <input type="checkbox"/> Ground Courier <input type="checkbox"/> Air Carrier	<input type="checkbox"/> Sampler <input type="checkbox"/> Other:	Air Bill Number:	Requested Due Date: <input checked="" type="checkbox"/> Standard Turn Around Time <input type="checkbox"/> Rush (mm/dd/yyyy)		

Distribution - White-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Scan and email: a copy to BarrDM@barr.com for tracking and filing procedures

1.3°C

H:\RUG\STDFORMS\Chain of Custody Form 2015 RUG Rev 03/20/2020

BARR Barr Engineering Co. Chain of Custody 2002758

Sample Origination State
 CO MI MN MO ND TX UT WI Other: _____

REPORT TO		INVOICE TO	
Company: <u>Barr Eng</u>	Address:	Company: <u>Barr Eng</u>	Address:
Name: <u>Andrea Nord</u>	email: <u>anord@barr.com</u>	Name:	email:
Copy to: <u>BarrDM@barr.com</u>	Project Name: <u>Bryn Mear</u>	P.O.:	Barr Project No: <u>23271806</u>

Analysis Requested		COC Number: No 585318
Water	Soil	
<u>DIO</u>		Matrix Code: _____ Preservative Code: _____ GW = Groundwater A = None SW = Surface Water B = HCl WW = Waste Water C = HNO ₃ DW = Drinking Water D = H ₂ SO ₄ S = Soil/Solid E = NaOH SD = Sediment F = MeOH O = Other G = NaHSO ₄ H = Na ₂ S ₂ O ₃ I = Ascorbic Acid J = Zn Acetate K = Other
<u>GRO</u>		
<u>VOC</u>		
<u>PAHs</u>		
<u>Dissolved Metals</u>		
Total Number of Containers		Preservative Code
		Field Filtered Y/N

Location	Sample Depth		Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform	MS	MSD	Y	N	Analysis Requested					% Solids	
	Start	Stop									Unit (m./ft. or in.)	DIO	GRO	VOC	PAHs		Dissolved Metals
1. <u>SB-06-20</u>	/	/	<u>07/15/2020</u>	<u>12:20</u>	<u>GW</u>	<u>N</u>	<u>9</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>1</u>						<u>10 A-I</u>
2. <u>SB-08-20</u>	/	/	<u>↓</u>	<u>15:00</u>	<u>GW</u>	<u>N</u>	<u>8</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>1</u>						<u>11 A-H</u>
3. <u>Prop Bank</u>																	<u>12 A-B</u>
4. <u>7/14/20</u>																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

BARR USE ONLY		Relinquished by: <u>[Signature]</u>	On Ice? <input checked="" type="radio"/> Y <input type="radio"/> N	Date: <u>7/16</u>	Time: <u>9:35</u>	Received by: <u>[Signature]</u>	Date: <u>7/16/20</u>	Time: <u>9:35</u>
Sampled by: <u>Alex Short</u>	Barr Proj. Manager: <u>Jenni Brekken</u>	Relinquished by:	On Ice? <input type="radio"/> Y <input type="radio"/> N	Date:	Time:	Received by:	Date:	Time:
Barr DQ Manager: <u>Andrea Nord</u>	Lab Name: <u>Legend</u>	Samples Shipped VIA: <input type="checkbox"/> Ground Courier <input type="checkbox"/> Air Carrier	Air Bill Number:		Requested Due Date: <input checked="" type="checkbox"/> Standard Turn Around Time <input type="checkbox"/> Rush _____ (mm/dd/yyyy)			
Lab Location: <u>St. Paul</u>	Lab WO:	Temperature on Receipt (°C):	Custody Seal Intact? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> None					

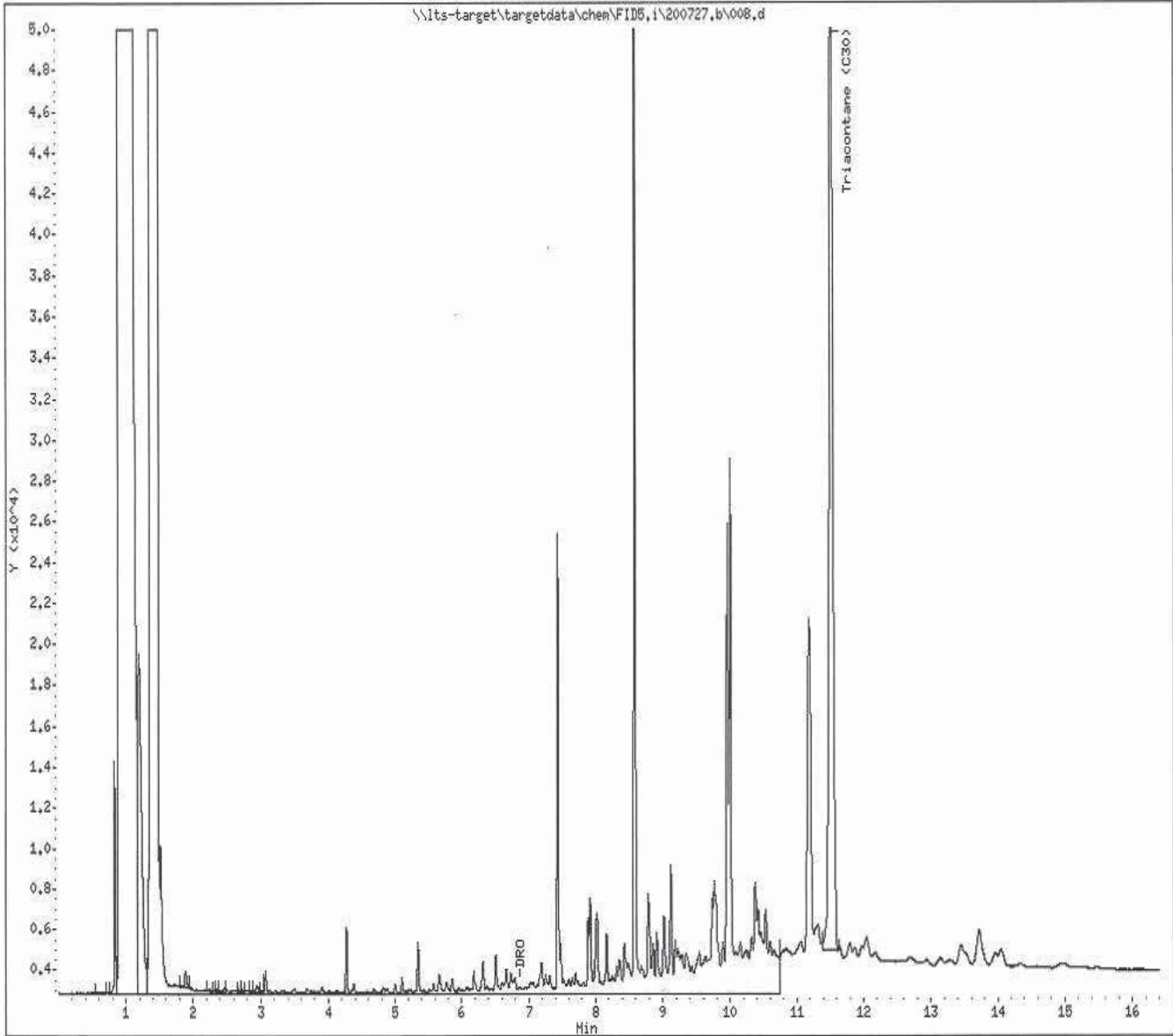
Distribution - White-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Scan and email: a copy to BarrDM@barr.com for tracking and filing procedures

1.3°C

H:\RLG\STDFORMS\Chain of Custody Form: 2015 RLG Rev. 01/30/2020

Data File: \\its-target\targetdata\chem\FID6,i\200727,b\008,d
Date : 27-JUL-2020 12:23
Client ID:
Sample Info: 2002758-01 sil
Column phase:

Page 2
Instrument: FID6,i
Operator: yg
Column diameter: 0.53



Data File: \\Its-target\targetdata\chem\FID5,i\200727,b\012,d

Page 2

Date : 27-JUL-2020 13:48

Client ID:

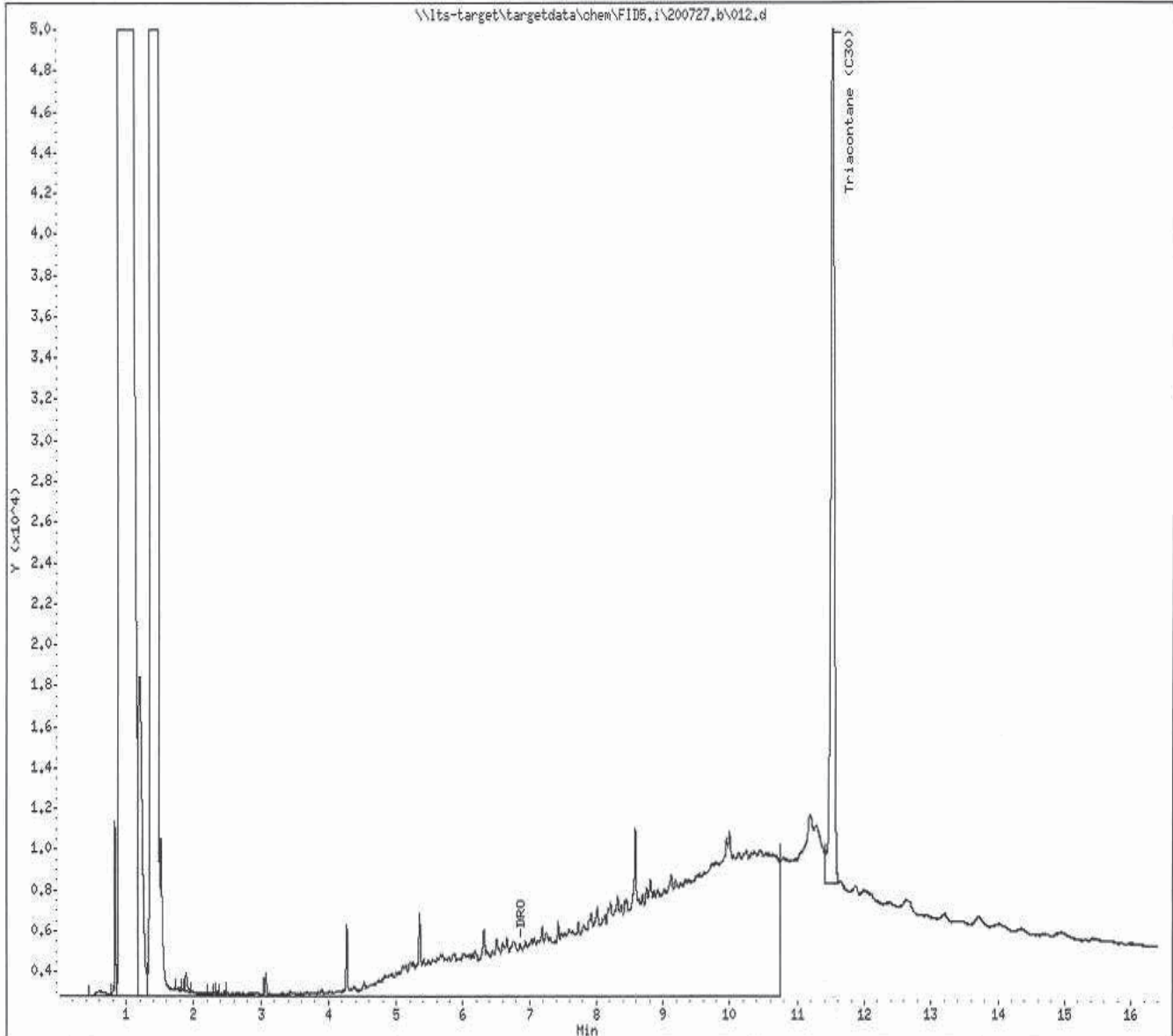
Instrument: FID5.i

Sample Info: 2002758-03 sil

Operator: yp

Column phase:

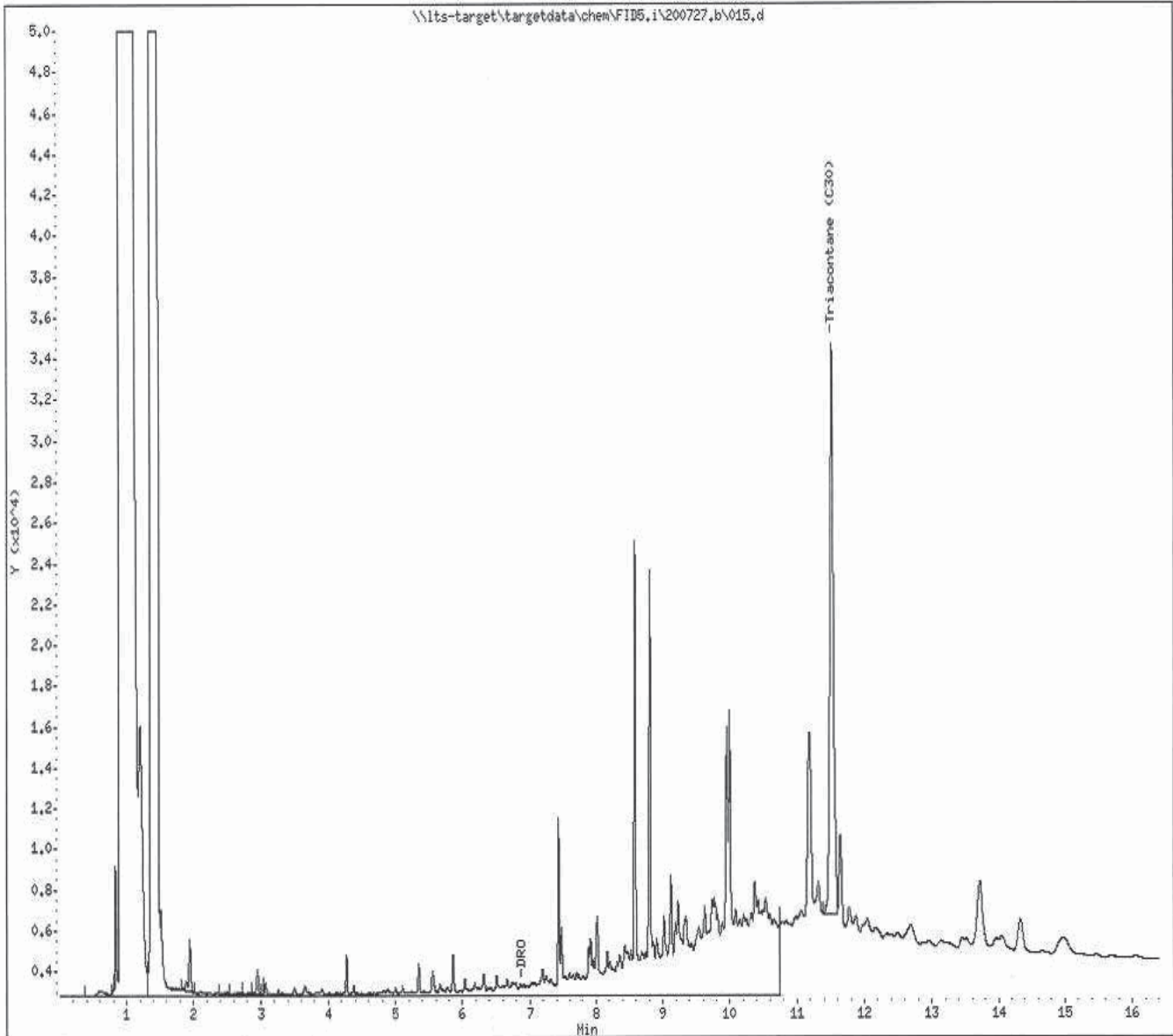
Column diameter: 0,53



Data File: \\its-target\targetdata\chem\FID5,i\200727,b\015,d
Date : 27-JUL-2020 14:52
Client ID:
Sample Info: 2002758-05 sil x2
Column phase:

Page 2

Instrument: FID5,i
Operator: yp
Column diameter: 0,53



Data File: \\lts-target\targetdata\chem\FID5,i\200727,b\020,d

Page 2

Date : 27-JUL-2020 16:39

Client ID:

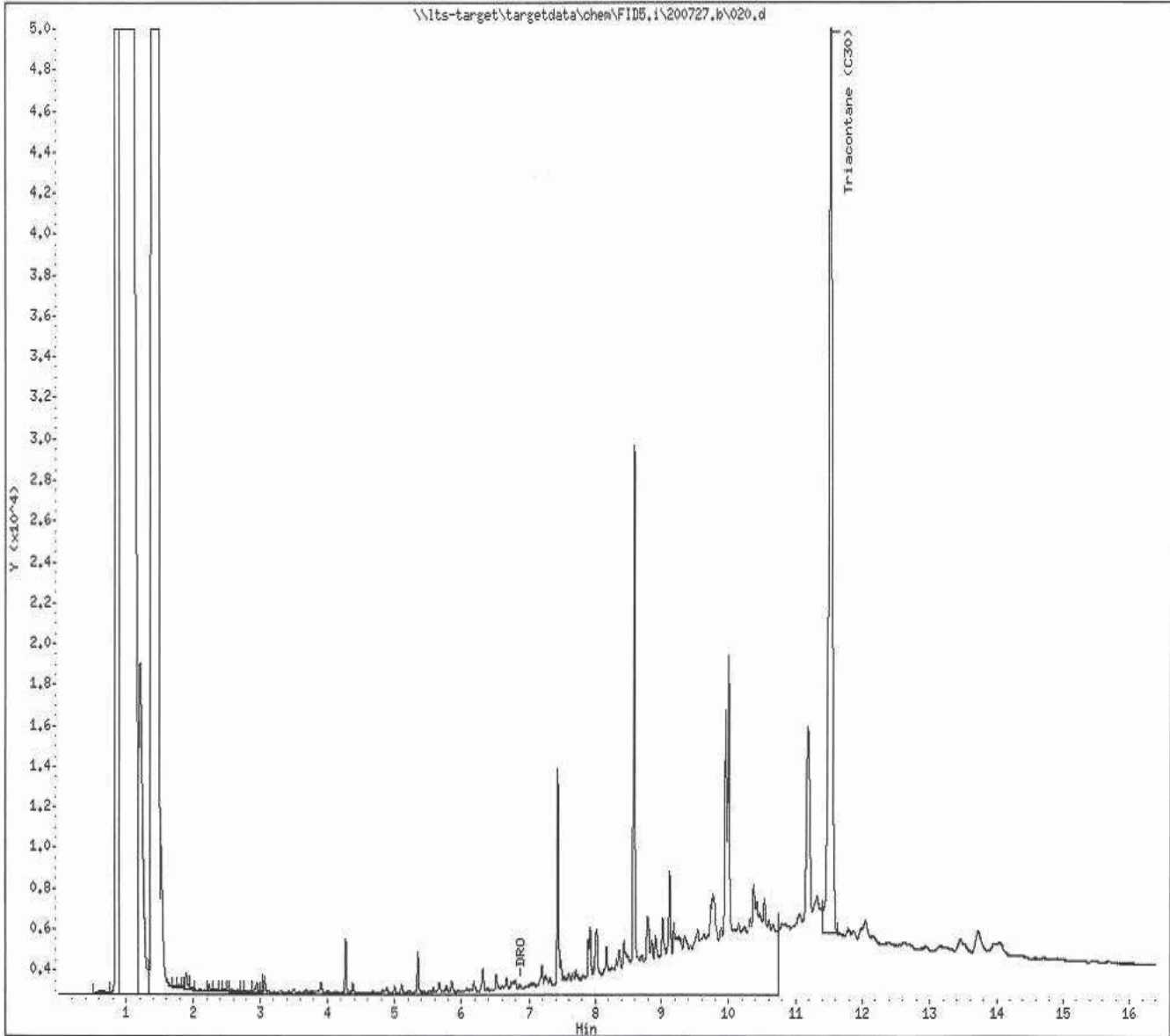
Instrument: FID5.i

Sample Info: 2002758-06 sil rr

Operator: yp

Column phase:

Column diameter: 0,53



BARR Barr Engineering Co. Chain of Custody

Sample Origination State: CO MI MN MO ND TX UT WI Other: _____

REPORT TO		INVOICE TO	
Company: Barr Eng.	Company: Barr Eng.	Address:	Address:
Name: Andrea Nord	Name:	email: anord@barr.com	email:
Copy to: BarrDM@barr.com	P.O.:	Project Name: Bryn Mawr	Barr Project No: 23271906

Location	Sample Depth		Unit (m./ft. or in.)	Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform. MS/MSD Y/N	Total Number of Containers	Analysis Requested			% Solids	
	Start	Stop							Water	Soil			
1. GP-04-20	0	3	ft	07/15/2020	9:00	S	N3						
2. GP-05-20	0	3			10:30	S	N3						
3. GP-05-20	5	7			16:30	S	N3						
4. GP-05-20	6	6			10:30	S	N1						
5. GP-06-20	0	3.5			11:40	S	N3						
6. GP-07-20	5	7			13:30	S	N4						
7. GP-07-20													
8. GP-07-20	14	15			13:50	S	N3						
9. GP-08-20	2	6			14:20	S	N3						
10. GP-08-20	5	6	✓	✓	14:20	S	N1						

Analysis Requested: VOC / PCB / PAHs / BCAA Metals

Matrix Code: GW = Groundwater SW = Surface Water WW = Waste Water DW = Drinking Water S = Soil/Solid SD = Sediment O = Other

Preservative Code: A = None B = HCl C = HNO₃ D = H₂SO₄ E = NaOH F = MeOH G = NaHSO₄ H = Na₂S₂O₃ I = Ascorbic Acid J = Zn Acetate K = Other

COC Number: 585317

COC 1 of 1

Field Filtered Y/N

Relinquished by: [Signature] On Ice? N Date: 7/16 Time: 9:35

Received by: [Signature] Date: 7/16 Time: 9:35

Samples Shipped VIA: Ground Courier Air Carrier Air Bill Number: _____

Lab Name: Legend Lab Location: St. Paul, MN Lab WO: _____ Temperature on Receipt (°C): _____ Custody Seal Intact? Y N None

Requested Due Date: Standard Turn Around Time Rush (mm/dd/yyyy)

Distribution - White-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Scan and email: a copy to BarrDM@barr.com for tracking and filing procedures

13°C

Scanned with CamScanner

BARR Barr Engineering Co. Chain of Custody

Sample Origination State: CO MI MN MO ND TX UT WI Other: _____

REPORT TO		INVOICE TO	
Company: <u>Barr Eng</u>	Company: <u>Barr Eng</u>	Address:	Address:
Name: <u>Andree Nord</u>	Name:	email: <u>anord@barr.com</u>	email:
Copy to: <u>BarrDM@barr.com</u>	P.O.:	Project Name: <u>Bryn Mawr</u>	Barr Project No: <u>23271906</u>

COC Number: 585318
 COC 1 of 1

Analysis Requested	Water		Soil	
	PERFORM	MS/MSD	Y	N
DRO				
GRO				
VOC				
PAHs				
Dissolved Metals				

Matrix Code:	Preservative Code:
GW = Groundwater	A = None
SW = Surface Water	B = HCl
WW = Waste Water	C = HNO ₃
DW = Drinking Water	D = H ₂ SO ₄
S = Soil/Solid	E = NaOH
SD = Sediment	F = MeOH
O = Other	G = NaHSO ₄
	H = Na ₂ S ₂ O ₅
	I = Ascorbic Acid
	J = Zn Acetate
	K = Other

Location	Sample Depth		Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform	MS/MSD	Y	N	Total Number of Containers	% Solids	Preservative Code	Field Filtered Y/N
	Start	Stop											
1. <u>GP-06-20</u>			<u>07/15/2020</u>	<u>12:20</u>	<u>GW</u>	<u>N</u>	<u>9</u>	<u>1</u>	<u>3</u>	<u>1</u>			
2. <u>GP-08-20</u>			<u>↓</u>	<u>15:00</u>	<u>GW</u>	<u>N</u>	<u>8</u>	<u>1</u>	<u>3</u>	<u>1</u>			
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													

BARR USE ONLY		Relinquished by: <u>[Signature]</u>	On Ice? <input checked="" type="checkbox"/> N	Date: <u>7/16</u>	Time: <u>9:35</u>	Received by: <u>[Signature]</u>	Date: <u>7/16/20</u>	Time: <u>9:35</u>
Sampled by: <u>Alex Short</u>	Barr Proj. Manager: <u>Jenna Brekken</u>	Relinquished by:	On Ice? <input type="checkbox"/> Y	Date:	Time:	Received by:	Date:	Time:
Barr DQ Manager: <u>Andree Nord</u>	Lab Name: <u>Legend</u>	Samples Shipped VIA: <input type="checkbox"/> Ground Courier <input type="checkbox"/> Air Carrier	Air Bill Number:		Requested Due Date: <input checked="" type="checkbox"/> Standard Turn Around Time <input type="checkbox"/> Rush			
Lab Location: <u>St. Paul</u>	Lab WO:	Temperature on Receipt (°C):	Custody Seal Intact? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> None		Date: (mm/dd/yyyy)			

Distribution - White-Original: Accompanies Shipment to Laboratory, Yellow Copy: Include in Field Documents; Scan and email: a copy to BarrDM@barr.com for tracking and filing procedures

Scanned with CamScanner

July 31, 2020

Ms. Andrea Nord
Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435

Work Order Number: 2002768
RE: 23271806

Enclosed are the results of analyses for samples received by the laboratory on 07/16/20. If you have any questions concerning this report, please feel free to contact me.

Samples will not be retained by LEGEND once the analyses are completed.

All internal quality assurance met the method requirements unless otherwise noted in the case narrative. Additionally, all samples were received in acceptable condition unless otherwise noted.


The results in this report apply to the samples as received.

For the tentatively identified compounds (TICs), a computer generated library search was done comparing the spectra of the unknown compounds with spectra contained in the NIST (NBS) and Wiley reference libraries. A visual comparison was made of each unknown compound and the best library match. Quantitation was based on the response of the nearest internal standard. Unidentified peaks were quantified using 100 as the molecular weight. Both the identification of specific compounds and the quantities given should be considered approximations.

Chromatograms are included for samples containing detections.

MDH Accreditation #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC

 Digitally signed by Bach Pham
DN: cn=Bach Pham, o, ou,
email=bpham@legend-
group.com, c=US
Date: 2020.07.31 10:25:25 -05'00'

Bach Pham
Client Manager II
bpham@legend-group.com

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-01-20	2002768-01	Air	07/15/20 08:36	07/16/20 09:35
SG-02-20	2002768-02	Air	07/15/20 08:34	07/16/20 09:35

Case Narrative:

Hydrocarbon patterns were observed in both samples between the retention times of 22 and 28 minutes.

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR
Legend Technical Services, Inc.

Analyte (CAS#)	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SG-01-20 (2002768-01) Air Received:07/16/20 09:35 Sampled:07/15/20 08:36										
1,1,1-Trichloroethane (71-55-6)	<2.7	2.7	0.54	ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	
1,1,2,2-Tetrachloroethane (79-34-5)	<3.4	3.4	0.82	ug/m ³	1	"	"	"	"	
1,1,2-Trichloroethane (79-00-5)	<2.7	2.7	0.65	ug/m ³	1	"	"	"	"	
1,1-Dichloroethane (75-34-3)	<2.0	2.0	0.29	ug/m ³	1	"	"	"	"	
1,1-Dichloroethene (75-35-4)	<2.0	2.0	0.34	ug/m ³	1	"	"	"	"	
1,2,4-Trichlorobenzene (120-82-1)	<3.7	3.7	0.82	ug/m ³	1	"	"	"	"	
1,2,4-Trimethylbenzene (95-63-6)	26	0.98	0.24	ug/m ³	1	"	"	"	"	
1,2-Dibromoethane (106-93-4)	<3.8	3.8	0.53	ug/m ³	1	"	"	"	"	
1,2-Dichlorobenzene (95-50-1)	<3.0	3.0	0.37	ug/m ³	1	"	"	"	"	
1,2-Dichloroethane (107-06-2)	<2.0	2.0	0.69	ug/m ³	1	"	"	"	"	
1,2-Dichloropropane (78-87-5)	<2.3	2.3	0.69	ug/m ³	1	"	"	"	"	
1,3,5-Trimethylbenzene (108-67-8)	7.2	0.98	0.27	ug/m ³	1	"	"	"	"	
1,3-Butadiene (106-99-0)	18	1.1	0.29	ug/m ³	1	"	"	"	"	
1,3-Dichlorobenzene (541-73-1)	<3.0	3.0	0.44	ug/m ³	1	"	"	"	"	
1,4-Dichlorobenzene (106-46-7)	<3.0	3.0	0.44	ug/m ³	1	"	"	"	"	
2-Butanone (78-93-3)	30	1.5	0.24	ug/m ³	1	"	"	"	"	
4-Ethyltoluene (622-96-8)	8.4	2.5	0.49	ug/m ³	1	"	"	"	"	
Acetone (67-64-1)	130	12	2.6	ug/m ³	10	"	"	07/20/20	"	
Benzene (71-43-2)	27	0.64	0.29	ug/m ³	1	"	"	07/20/20	"	
Benzyl chloride (100-44-7)	<2.6	2.6	0.62	ug/m ³	1	"	"	"	"	
Bromodichloromethane (75-27-4)	<3.4	3.4	0.94	ug/m ³	1	"	"	"	"	
Bromoform (75-25-2)	<5.2	5.2	0.68	ug/m ³	1	"	"	"	"	
Bromomethane (74-83-9)	<1.9	1.9	0.10	ug/m ³	1	"	"	"	"	
Carbon disulfide (75-15-0)	8.7	1.6	0.22	ug/m ³	1	"	"	"	"	
Carbon tetrachloride (56-23-5)	<3.1	3.1	0.59	ug/m ³	1	"	"	"	"	
Chlorobenzene (108-90-7)	<2.3	2.3	0.45	ug/m ³	1	"	"	"	"	
Chloroethane (75-00-3)	<1.3	1.3	0.18	ug/m ³	1	"	"	"	"	
Chloroform (67-66-3)	<2.4	2.4	0.63	ug/m ³	1	"	"	"	"	
Chloromethane (74-87-3)	<1.0	1.0	0.17	ug/m ³	1	"	"	"	"	
cis-1,2-Dichloroethene (156-59-2)	<2.0	2.0	0.27	ug/m ³	1	"	"	"	"	
cis-1,3-Dichloropropene (10061-01-5)	<2.3	2.3	0.82	ug/m ³	1	"	"	"	"	
Cyclohexane (110-82-7)	13	1.7	0.52	ug/m ³	1	"	"	"	"	
Dibromochloromethane (124-48-1)	<4.3	4.3	0.82	ug/m ³	1	"	"	"	"	
Dichlorodifluoromethane (75-71-8)	<2.5	2.5	0.19	ug/m ³	1	"	"	"	"	
Dichlorotetrafluoroethane (76-14-2)	<3.5	3.5	0.28	ug/m ³	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR
Legend Technical Services, Inc.

Analyte (CAS#)	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SG-01-20 (2002768-01) Air Received:07/16/20 09:35 Sampled:07/15/20 08:36										
Ethanol (64-17-5)	33	0.94	0.24	ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	
Ethyl acetate (141-78-6)	<1.8	1.8	0.40	ug/m ³	1	"	"	"	"	
Ethylbenzene (100-41-4)	48	0.87	0.28	ug/m ³	1	"	"	"	"	
Hexachlorobutadiene (87-68-3)	<5.3	5.3	1.4	ug/m ³	1	"	"	"	"	
Isopropyl alcohol (67-63-0)	13	1.2	0.20	ug/m ³	1	"	"	"	"	
m,p-Xylene (179601-23-1)	220	17	4.8	ug/m ³	10	"	"	07/20/20	"	
Methyl butyl ketone (591-78-6)	2.3	2.0	0.49	ug/m ³	1	"	"	07/20/20	"	
Methyl isobutyl ketone (108-10-1)	5.0	2.0	0.41	ug/m ³	1	"	"	"	"	
Methyl tert-butyl ether (1634-04-4)	<1.8	1.8	0.19	ug/m ³	1	"	"	"	"	
Methylene chloride (75-09-2)	<1.7	1.7	0.76	ug/m ³	1	"	"	"	"	
Naphthalene (91-20-3)	<2.6	2.6	0.47	ug/m ³	1	"	"	"	"	
n-Heptane (142-82-5)	63	2.0	0.39	ug/m ³	1	"	"	"	"	
n-Hexane (110-54-3)	33	1.8	0.32	ug/m ³	1	"	"	"	"	
o-Xylene (95-47-6)	47	0.87	0.25	ug/m ³	1	"	"	"	"	
Propylene (115-07-1)	240	8.6	1.3	ug/m ³	10	"	"	07/20/20	"	
Styrene (100-42-5)	<2.1	2.1	0.37	ug/m ³	1	"	"	07/20/20	"	
Tetrachloroethene (127-18-4)	<3.4	3.4	0.59	ug/m ³	1	"	"	"	"	
Tetrahydrofuran (109-99-9)	5.7	1.5	0.56	ug/m ³	1	"	"	"	"	
Toluene (108-88-3)	240	7.5	2.8	ug/m ³	10	"	"	07/20/20	"	
trans-1,2-Dichloroethene (156-60-5)	<2.0	2.0	0.38	ug/m ³	1	"	"	07/20/20	"	
trans-1,3-Dichloropropene (10061-02-6)	<2.3	2.3	0.54	ug/m ³	1	"	"	"	"	
Trichloroethene (79-01-6)	<1.1	1.1	0.49	ug/m ³	1	"	"	"	"	
Trichlorofluoromethane (75-69-4)	<2.8	2.8	0.20	ug/m ³	1	"	"	"	"	
Trichlorotrifluoroethane (76-13-1)	<3.8	3.8	0.21	ug/m ³	1	"	"	"	"	
Vinyl acetate (108-05-4)	<1.8	1.8	0.20	ug/m ³	1	"	"	"	"	
Vinyl chloride (75-01-4)	<0.51	0.51	0.14	ug/m ³	1	"	"	"	"	

SG-02-20 (2002768-02) Air Received:07/16/20 09:35 Sampled:07/15/20 08:34										
1,1,1-Trichloroethane (71-55-6)	<2.7	2.7	0.54	ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	
1,1,2,2-Tetrachloroethane (79-34-5)	<3.4	3.4	0.82	ug/m ³	1	"	"	"	"	
1,1,2-Trichloroethane (79-00-5)	<2.7	2.7	0.65	ug/m ³	1	"	"	"	"	
1,1-Dichloroethane (75-34-3)	<2.0	2.0	0.29	ug/m ³	1	"	"	"	"	
1,1-Dichloroethene (75-35-4)	<2.0	2.0	0.34	ug/m ³	1	"	"	"	"	
1,2,4-Trichlorobenzene (120-82-1)	<3.7	3.7	0.82	ug/m ³	1	"	"	"	"	
1,2,4-Trimethylbenzene (95-63-6)	25	0.98	0.24	ug/m ³	1	"	"	"	"	
1,2-Dibromoethane (106-93-4)	<3.8	3.8	0.53	ug/m ³	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR
Legend Technical Services, Inc.

Analyte (CAS#)	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SG-02-20 (2002768-02) Air Received:07/16/20 09:35 Sampled:07/15/20 08:34										
1,2-Dichlorobenzene (95-50-1)	<3.0	3.0	0.37	ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	
1,2-Dichloroethane (107-06-2)	<2.0	2.0	0.69	ug/m ³	1	"	"	"	"	
1,2-Dichloropropane (78-87-5)	<2.3	2.3	0.69	ug/m ³	1	"	"	"	"	
1,3,5-Trimethylbenzene (108-67-8)	6.9	0.98	0.27	ug/m ³	1	"	"	"	"	
1,3-Butadiene (106-99-0)	4.1	1.1	0.29	ug/m ³	1	"	"	"	"	
1,3-Dichlorobenzene (541-73-1)	<3.0	3.0	0.44	ug/m ³	1	"	"	"	"	
1,4-Dichlorobenzene (106-46-7)	<3.0	3.0	0.44	ug/m ³	1	"	"	"	"	
2-Butanone (78-93-3)	9.2	1.5	0.24	ug/m ³	1	"	"	"	"	
4-Ethyltoluene (622-96-8)	8.3	2.5	0.49	ug/m ³	1	"	"	"	"	
Acetone (67-64-1)	38	1.2	0.26	ug/m ³	1	"	"	"	"	
Benzene (71-43-2)	11	0.64	0.29	ug/m ³	1	"	"	"	"	
Benzyl chloride (100-44-7)	<2.6	2.6	0.62	ug/m ³	1	"	"	"	"	
Bromodichloromethane (75-27-4)	<3.4	3.4	0.94	ug/m ³	1	"	"	"	"	
Bromoform (75-25-2)	<5.2	5.2	0.68	ug/m ³	1	"	"	"	"	
Bromomethane (74-83-9)	<1.9	1.9	0.10	ug/m ³	1	"	"	"	"	
Carbon disulfide (75-15-0)	6.9	1.6	0.22	ug/m ³	1	"	"	"	"	
Carbon tetrachloride (56-23-5)	<3.1	3.1	0.59	ug/m ³	1	"	"	"	"	
Chlorobenzene (108-90-7)	<2.3	2.3	0.45	ug/m ³	1	"	"	"	"	
Chloroethane (75-00-3)	<1.3	1.3	0.18	ug/m ³	1	"	"	"	"	
Chloroform (67-66-3)	<2.4	2.4	0.63	ug/m ³	1	"	"	"	"	
Chloromethane (74-87-3)	<1.0	1.0	0.17	ug/m ³	1	"	"	"	"	
cis-1,2-Dichloroethene (156-59-2)	<2.0	2.0	0.27	ug/m ³	1	"	"	"	"	
cis-1,3-Dichloropropene (10061-01-5)	<2.3	2.3	0.82	ug/m ³	1	"	"	"	"	
Cyclohexane (110-82-7)	5.0	1.7	0.52	ug/m ³	1	"	"	"	"	
Dibromochloromethane (124-48-1)	<4.3	4.3	0.82	ug/m ³	1	"	"	"	"	
Dichlorodifluoromethane (75-71-8)	<2.5	2.5	0.19	ug/m ³	1	"	"	"	"	
Dichlorotetrafluoroethane (76-14-2)	<3.5	3.5	0.28	ug/m ³	1	"	"	"	"	
Ethanol (64-17-5)	15	0.94	0.24	ug/m ³	1	"	"	"	"	
Ethyl acetate (141-78-6)	<1.8	1.8	0.40	ug/m ³	1	"	"	"	"	
Ethylbenzene (100-41-4)	29	0.87	0.28	ug/m ³	1	"	"	"	"	
Hexachlorobutadiene (87-68-3)	<5.3	5.3	1.4	ug/m ³	1	"	"	"	"	
Isopropyl alcohol (67-63-0)	5.0	1.2	0.20	ug/m ³	1	"	"	"	"	
m,p-Xylene (179601-23-1)	120	1.7	0.48	ug/m ³	1	"	"	"	"	
Methyl butyl ketone (591-78-6)	<2.0	2.0	0.49	ug/m ³	1	"	"	"	"	
Methyl isobutyl ketone (108-10-1)	9.8	2.0	0.41	ug/m ³	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR
Legend Technical Services, Inc.

Analyte (CAS#)	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SG-02-20 (2002768-02) Air Received:07/16/20 09:35 Sampled:07/15/20 08:34										
Methyl tert-butyl ether (1634-04-4)	<1.8	1.8	0.19	ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	
Methylene chloride (75-09-2)	<1.7	1.7	0.76	ug/m ³	1	"	"	"	"	
Naphthalene (91-20-3)	<2.6	2.6	0.47	ug/m ³	1	"	"	"	"	
n-Heptane (142-82-5)	24	2.0	0.39	ug/m ³	1	"	"	"	"	
n-Hexane (110-54-3)	12	1.8	0.32	ug/m ³	1	"	"	"	"	
o-Xylene (95-47-6)	30	0.87	0.25	ug/m ³	1	"	"	"	"	
Propylene (115-07-1)	27	0.86	0.13	ug/m ³	1	"	"	"	"	
Styrene (100-42-5)	<2.1	2.1	0.37	ug/m ³	1	"	"	"	"	
Tetrachloroethene (127-18-4)	<3.4	3.4	0.59	ug/m ³	1	"	"	"	"	
Tetrahydrofuran (109-99-9)	1.9	1.5	0.56	ug/m ³	1	"	"	"	"	
Toluene (108-88-3)	100	3.8	1.4	ug/m ³	5	"	"	07/20/20	"	
trans-1,2-Dichloroethene (156-60-5)	<2.0	2.0	0.38	ug/m ³	1	"	"	07/20/20	"	
trans-1,3-Dichloropropene (10061-02-6)	<2.3	2.3	0.54	ug/m ³	1	"	"	"	"	
Trichloroethene (79-01-6)	<1.1	1.1	0.49	ug/m ³	1	"	"	"	"	
Trichlorofluoromethane (75-69-4)	<2.8	2.8	0.20	ug/m ³	1	"	"	"	"	
Trichlorotrifluoroethane (76-13-1)	<3.8	3.8	0.21	ug/m ³	1	"	"	"	"	
Vinyl acetate (108-05-4)	<1.8	1.8	0.20	ug/m ³	1	"	"	"	"	
Vinyl chloride (75-01-4)	<0.51	0.51	0.14	ug/m ³	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

TENTATIVELY IDENTIFIED COMPOUNDS
Legend Technical Services, Inc.

Analyte (CAS#)	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SG-01-20 (2002768-01) Air Received:07/16/20 09:35 Sampled:07/15/20 08:36										
1-Propene, 2-methyl- (115-11-7)	73			ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	T4
Acetaldehyde (75-07-0)	26			ug/m ³	1	"	"	"	"	T4
Butane (106-97-8)	46			ug/m ³	1	"	"	"	"	T4
Butane, 2-methyl- (78-78-4)	47			ug/m ³	1	"	"	"	"	T4
Cyclohexanone (108-94-1)	110			ug/m ³	1	"	"	"	"	T4
Decane (124-18-5)	210			ug/m ³	1	"	"	"	"	T4
Pentane (109-66-0)	38			ug/m ³	1	"	"	"	"	T4
Propyne (74-99-7)	25			ug/m ³	1	"	"	"	"	T4
Tridecane, 6-propyl- (55045-10-8)	120			ug/m ³	1	"	"	"	"	T4
Undecane, 4-methyl- (2980-69-0)	120			ug/m ³	1	"	"	"	"	T4
SG-02-20 (2002768-02) Air Received:07/16/20 09:35 Sampled:07/15/20 08:34										
1-Decene (872-05-9)	69			ug/m ³	1	B0G2021	07/19/20	07/20/20	TO-15	T4
1-Propene, 2-methyl- (115-11-7)	16			ug/m ³	1	"	"	"	"	T4
Butane (106-97-8)	27			ug/m ³	1	"	"	"	"	T4
Butane, 2-methyl- (78-78-4)	36			ug/m ³	1	"	"	"	"	T4
Cyclohexanone (108-94-1)	64			ug/m ³	1	"	"	"	"	T4
Decane (124-18-5)	230			ug/m ³	1	"	"	"	"	T4
Octane (111-65-9)	31			ug/m ³	1	"	"	"	"	T4
Pentane (109-66-0)	27			ug/m ³	1	"	"	"	"	T4
Propyne (74-99-7)	13			ug/m ³	1	"	"	"	"	T4
Tridecane, 6-methyl- (13287-21-3)	100			ug/m ³	1	"	"	"	"	T4
Undecane, 4-methyl- (2980-69-0)	100			ug/m ³	1	"	"	"	"	T4

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2021 - TO-15

Blank (B0G2021-BLK1)

Prepared & Analyzed: 07/19/20

1,1,1-Trichloroethane	< 2.7	2.7	0.54	ug/m ³							
1,1,2,2-Tetrachloroethane	< 3.4	3.4	0.82	ug/m ³							
1,1,2-Trichloroethane	< 2.7	2.7	0.65	ug/m ³							
1,1-Dichloroethane	< 2.0	2.0	0.29	ug/m ³							
1,1-Dichloroethene	< 2.0	2.0	0.34	ug/m ³							
1,2,4-Trichlorobenzene	< 3.7	3.7	0.82	ug/m ³							
1,2,4-Trimethylbenzene	< 0.98	0.98	0.24	ug/m ³							
1,2-Dibromoethane	< 3.8	3.8	0.53	ug/m ³							
1,2-Dichlorobenzene	< 3.0	3.0	0.37	ug/m ³							
1,2-Dichloroethane	< 2.0	2.0	0.69	ug/m ³							
1,2-Dichloropropane	< 2.3	2.3	0.69	ug/m ³							
1,3,5-Trimethylbenzene	< 0.98	0.98	0.27	ug/m ³							
1,3-Butadiene	< 1.1	1.1	0.29	ug/m ³							
1,3-Dichlorobenzene	< 3.0	3.0	0.44	ug/m ³							
1,4-Dichlorobenzene	< 3.0	3.0	0.44	ug/m ³							
2-Butanone	< 1.5	1.5	0.24	ug/m ³							
4-Ethyltoluene	< 2.5	2.5	0.49	ug/m ³							
Acetone	< 1.2	1.2	0.26	ug/m ³							
Benzene	< 0.64	0.64	0.29	ug/m ³							
Benzyl chloride	< 2.6	2.6	0.62	ug/m ³							
Bromodichloromethane	< 3.4	3.4	0.94	ug/m ³							
Bromoform	< 5.2	5.2	0.68	ug/m ³							
Bromomethane	< 1.9	1.9	0.10	ug/m ³							
Carbon disulfide	< 1.6	1.6	0.22	ug/m ³							
Carbon tetrachloride	< 3.1	3.1	0.59	ug/m ³							
Chlorobenzene	< 2.3	2.3	0.45	ug/m ³							
Chloroethane	< 1.3	1.3	0.18	ug/m ³							
Chloroform	< 2.4	2.4	0.63	ug/m ³							
Chloromethane	< 1.0	1.0	0.17	ug/m ³							
cis-1,2-Dichloroethene	< 2.0	2.0	0.27	ug/m ³							
cis-1,3-Dichloropropene	< 2.3	2.3	0.82	ug/m ³							
Cyclohexane	< 1.7	1.7	0.52	ug/m ³							
Dibromochloromethane	< 4.3	4.3	0.82	ug/m ³							
Dichlorodifluoromethane	< 2.5	2.5	0.19	ug/m ³							
Dichlorotetrafluoroethane	< 3.5	3.5	0.28	ug/m ³							
Ethanol	< 0.94	0.94	0.24	ug/m ³							
Ethyl acetate	< 1.8	1.8	0.40	ug/m ³							
Ethylbenzene	< 0.87	0.87	0.28	ug/m ³							
Hexachlorobutadiene	< 5.3	5.3	1.4	ug/m ³							
Isopropyl alcohol	< 1.2	1.2	0.20	ug/m ³							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2021 - TO-15

Blank (B0G2021-BLK1)

Prepared & Analyzed: 07/19/20

m,p-Xylene	< 1.7	1.7	0.48	ug/m ³							
Methyl butyl ketone	< 2.0	2.0	0.49	ug/m ³							
Methyl isobutyl ketone	< 2.0	2.0	0.41	ug/m ³							
Methyl tert-butyl ether	< 1.8	1.8	0.19	ug/m ³							
Methylene chloride	< 1.7	1.7	0.76	ug/m ³							
Naphthalene	< 2.6	2.6	0.47	ug/m ³							
n-Heptane	< 2.0	2.0	0.39	ug/m ³							
n-Hexane	< 1.8	1.8	0.32	ug/m ³							
o-Xylene	< 0.87	0.87	0.25	ug/m ³							
Propylene	< 0.86	0.86	0.13	ug/m ³							
Styrene	< 2.1	2.1	0.37	ug/m ³							
Tetrachloroethene	< 3.4	3.4	0.59	ug/m ³							
Tetrahydrofuran	< 1.5	1.5	0.56	ug/m ³							
Toluene	< 0.75	0.75	0.28	ug/m ³							
trans-1,2-Dichloroethene	< 2.0	2.0	0.38	ug/m ³							
trans-1,3-Dichloropropene	< 2.3	2.3	0.54	ug/m ³							
Trichloroethene	< 1.1	1.1	0.49	ug/m ³							
Trichlorofluoromethane	< 2.8	2.8	0.20	ug/m ³							
Trichlorotrifluoroethane	< 3.8	3.8	0.21	ug/m ³							
Vinyl acetate	< 1.8	1.8	0.20	ug/m ³							
Vinyl chloride	< 0.51	0.51	0.14	ug/m ³							

LCS (B0G2021-BS1)

Prepared & Analyzed: 07/19/20

1,1,1-Trichloroethane	54.6	2.7	0.54	ug/m ³	54.6	<2.7	100	70-130
1,1,2,2-Tetrachloroethane	65.2	3.4	0.82	ug/m ³	68.6	<3.4	95.0	70-130
1,1,2-Trichloroethane	51.5	2.7	0.65	ug/m ³	54.6	<2.7	94.3	70-130
1,1-Dichloroethane	36.9	2.0	0.29	ug/m ³	40.5	<2.0	91.2	70-130
1,1-Dichloroethene	38.7	2.0	0.34	ug/m ³	39.6	<2.0	97.5	70-130
1,2,4-Trichlorobenzene	83.9	3.7	0.82	ug/m ³	74.2	<3.7	113	70-130
1,2,4-Trimethylbenzene	45.3	0.98	0.24	ug/m ³	49.2	<0.98	92.2	70-130
1,2-Dibromoethane	79.9	3.8	0.53	ug/m ³	76.8	<3.8	104	70-130
1,2-Dichlorobenzene	56.4	3.0	0.37	ug/m ³	60.1	<3.0	93.8	70-130
1,2-Dichloroethane	43.7	2.0	0.69	ug/m ³	40.5	<2.0	108	70-130
1,2-Dichloropropane	48.5	2.3	0.69	ug/m ³	46.2	<2.3	105	70-130
1,3,5-Trimethylbenzene	45.3	0.98	0.27	ug/m ³	49.2	<0.98	92.2	70-130
1,3-Butadiene	17.4	1.1	0.29	ug/m ³	22.1	<1.1	78.6	70-130
1,3-Dichlorobenzene	57.1	3.0	0.44	ug/m ³	60.1	<3.0	94.9	70-130
1,4-Dichlorobenzene	58.8	3.0	0.44	ug/m ³	60.1	<3.0	97.8	70-130
2-Butanone	22.8	1.5	0.24	ug/m ³	29.5	<1.5	77.4	70-130
4-Ethyltoluene	48.4	2.5	0.49	ug/m ³	49.2	<2.5	98.5	70-130

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2021 - TO-15

LCS (B0G2021-BS1)

Prepared & Analyzed: 07/19/20

Acetone	19.3	1.2	0.26	ug/m ³	23.8	<1.2	81.2	70-130			
Benzene	31.9	0.64	0.29	ug/m ³	31.9	<0.64	99.7	70-130			
Benzyl chloride	53.3	2.6	0.62	ug/m ³	51.8	<2.6	103	70-130			
Bromodichloromethane	66.7	3.4	0.94	ug/m ³	67.0	<3.4	99.6	70-130			
Bromoform	100	5.2	0.68	ug/m ³	103	<5.2	96.9	70-130			
Bromomethane	37.6	1.9	0.10	ug/m ³	38.8	<1.9	96.9	70-130			
Carbon disulfide	28.7	1.6	0.22	ug/m ³	31.1	<1.6	92.0	70-130			
Carbon tetrachloride	65.4	3.1	0.59	ug/m ³	62.9	<3.1	104	70-130			
Chlorobenzene	45.2	2.3	0.45	ug/m ³	46.0	<2.3	98.1	70-130			
Chloroethane	24.9	1.3	0.18	ug/m ³	26.4	<1.3	94.5	70-130			
Chloroform	48.6	2.4	0.63	ug/m ³	48.8	<2.4	99.6	70-130			
Chloromethane	18.6	1.0	0.17	ug/m ³	20.6	<1.0	90.2	70-130			
cis-1,2-Dichloroethene	37.0	2.0	0.27	ug/m ³	39.6	<2.0	93.2	70-130			
cis-1,3-Dichloropropene	44.1	2.3	0.82	ug/m ³	45.4	<2.3	97.2	70-130			
Cyclohexane	31.4	1.7	0.52	ug/m ³	34.4	<1.7	91.1	70-130			
Dibromochloromethane	86.9	4.3	0.82	ug/m ³	85.2	<4.3	102	70-130			
Dichlorodifluoromethane	44.0	2.5	0.19	ug/m ³	49.5	<2.5	89.0	70-130			
Dichlorotetrafluoroethane	66.6	3.5	0.28	ug/m ³	69.9	<3.5	95.3	70-130			
Ethanol	16.1	0.94	0.24	ug/m ³	18.8	<0.94	85.4	70-130			
Ethyl acetate	32.9	1.8	0.40	ug/m ³	36.0	<1.8	91.4	70-130			
Ethylbenzene	42.4	0.87	0.28	ug/m ³	43.4	<0.87	97.7	70-130			
Hexachlorobutadiene	93.5	5.3	1.4	ug/m ³	107	<5.3	87.7	70-130			
Isopropyl alcohol	21.1	1.2	0.20	ug/m ³	24.6	<1.2	85.9	70-130			
m,p-Xylene	82.5	1.7	0.48	ug/m ³	86.8	<1.7	95.0	70-130			
Methyl butyl ketone	37.6	2.0	0.49	ug/m ³	41.0	<2.0	91.9	70-130			
Methyl isobutyl ketone	38.1	2.0	0.41	ug/m ³	41.0	<2.0	93.0	70-130			
Methyl tert-butyl ether	33.2	1.8	0.19	ug/m ³	36.1	<1.8	92.0	70-130			
Methylene chloride	28.6	1.7	0.76	ug/m ³	34.7	<1.7	82.2	70-130			
Naphthalene	60.8	2.6	0.47	ug/m ³	52.4	<2.6	116	70-130			
n-Heptane	39.3	2.0	0.39	ug/m ³	41.0	<2.0	96.0	70-130			
n-Hexane	30.6	1.8	0.32	ug/m ³	35.2	<1.8	86.8	70-130			
o-Xylene	41.4	0.87	0.25	ug/m ³	43.4	<0.87	95.3	70-130			
Propylene	12.2	0.86	0.13	ug/m ³	17.2	<0.86	70.6	70-130			
Styrene	42.0	2.1	0.37	ug/m ³	42.6	<2.1	98.6	70-130			
Tetrachloroethene	65.4	3.4	0.59	ug/m ³	67.8	<3.4	96.4	70-130			
Tetrahydrofuran	22.6	1.5	0.56	ug/m ³	29.5	<1.5	76.7	70-130			
Toluene	37.0	0.75	0.28	ug/m ³	37.7	<0.75	98.3	70-130			
trans-1,2-Dichloroethene	35.1	2.0	0.38	ug/m ³	39.6	<2.0	88.6	70-130			
trans-1,3-Dichloropropene	44.2	2.3	0.54	ug/m ³	45.4	<2.3	97.4	70-130			
Trichloroethene	53.0	1.1	0.49	ug/m ³	53.7	<1.1	98.6	70-130			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2021 - TO-15

LCS (B0G2021-BS1)

Prepared & Analyzed: 07/19/20

Trichlorofluoromethane	57.3	2.8	0.20	ug/m ³	56.2	<2.8	102	70-130			
Trichlorotrifluoroethane	69.0	3.8	0.21	ug/m ³	76.6	<3.8	90.0	70-130			
Vinyl acetate	27.2	1.8	0.20	ug/m ³	35.2	<1.8	77.2	70-130			
Vinyl chloride	23.4	0.51	0.14	ug/m ³	25.6	<0.51	91.5	70-130			

Duplicate (B0G2021-DUP1)

Source: 2002779-01

Prepared & Analyzed: 07/19/20

1,1,1-Trichloroethane	< 2.7	2.7	0.54	ug/m ³		<2.7		NA	25	
1,1,1,2-Tetrachloroethane	< 3.4	3.4	0.82	ug/m ³		<3.4		NA	25	
1,1,2-Trichloroethane	< 2.7	2.7	0.65	ug/m ³		<2.7		NA	25	
1,1-Dichloroethane	< 2.0	2.0	0.29	ug/m ³		<2.0		NA	25	
1,1-Dichloroethene	< 2.0	2.0	0.34	ug/m ³		<2.0		NA	25	
1,2,4-Trichlorobenzene	< 3.7	3.7	0.82	ug/m ³		<3.7		NA	25	
1,2,4-Trimethylbenzene	< 0.98	0.98	0.24	ug/m ³		<0.98		NA	25	
1,2-Dibromoethane	< 3.8	3.8	0.53	ug/m ³		<3.8		NA	25	
1,2-Dichlorobenzene	< 3.0	3.0	0.37	ug/m ³		<3.0		NA	25	
1,2-Dichloroethane	< 2.0	2.0	0.69	ug/m ³		<2.0		NA	25	
1,2-Dichloropropane	< 2.3	2.3	0.69	ug/m ³		<2.3		NA	25	
1,3,5-Trimethylbenzene	< 0.98	0.98	0.27	ug/m ³		<0.98		NA	25	
1,3-Butadiene	< 1.1	1.1	0.29	ug/m ³		<1.1		NA	25	
1,3-Dichlorobenzene	< 3.0	3.0	0.44	ug/m ³		<3.0		NA	25	
1,4-Dichlorobenzene	< 3.0	3.0	0.44	ug/m ³		<3.0		NA	25	
2-Butanone	< 1.5	1.5	0.24	ug/m ³		<1.5		NA	25	
4-Ethyltoluene	< 2.5	2.5	0.49	ug/m ³		<2.5		NA	25	
Acetone	22.7	1.2	0.26	ug/m ³		22.4		1.41	25	
Benzene	< 0.64	0.64	0.29	ug/m ³		<0.64		NA	25	
Benzyl chloride	< 2.6	2.6	0.62	ug/m ³		<2.6		NA	25	
Bromodichloromethane	< 3.4	3.4	0.94	ug/m ³		<3.4		NA	25	
Bromoform	< 5.2	5.2	0.68	ug/m ³		<5.2		NA	25	
Bromomethane	< 1.9	1.9	0.10	ug/m ³		<1.9		NA	25	
Carbon disulfide	< 1.6	1.6	0.22	ug/m ³		<1.6		NA	25	
Carbon tetrachloride	< 3.1	3.1	0.59	ug/m ³		<3.1		NA	25	
Chlorobenzene	< 2.3	2.3	0.45	ug/m ³		<2.3		NA	25	
Chloroethane	< 1.3	1.3	0.18	ug/m ³		<1.3		NA	25	
Chloroform	< 2.4	2.4	0.63	ug/m ³		<2.4		NA	25	
Chloromethane	1.15	1.0	0.17	ug/m ³		1.17		1.64	25	
cis-1,2-Dichloroethene	< 2.0	2.0	0.27	ug/m ³		<2.0		NA	25	
cis-1,3-Dichloropropene	< 2.3	2.3	0.82	ug/m ³		<2.3		NA	25	
Cyclohexane	< 1.7	1.7	0.52	ug/m ³		<1.7		NA	25	
Dibromochloromethane	< 4.3	4.3	0.82	ug/m ³		<4.3		NA	25	
Dichlorodifluoromethane	< 2.5	2.5	0.19	ug/m ³		<2.5		NA	25	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

VOC - AIR - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2021 - TO-15											
Duplicate (B0G2021-DUP1)		Source: 2002779-01				Prepared & Analyzed: 07/19/20					
Dichlorotetrafluoroethane	< 3.5	3.5	0.28	ug/m ³		<3.5			NA	25	
Ethanol	10.5	0.94	0.24	ug/m ³		10.7			1.61	25	
Ethyl acetate	< 1.8	1.8	0.40	ug/m ³		<1.8			NA	25	
Ethylbenzene	< 0.87	0.87	0.28	ug/m ³		<0.87			NA	25	
Hexachlorobutadiene	< 5.3	5.3	1.4	ug/m ³		<5.3			NA	25	
Isopropyl alcohol	10.8	1.2	0.20	ug/m ³		10.1			7.13	25	
m,p-Xylene	2.25	1.7	0.48	ug/m ³		2.11			6.14	25	
Methyl butyl ketone	< 2.0	2.0	0.49	ug/m ³		<2.0			NA	25	
Methyl isobutyl ketone	< 2.0	2.0	0.41	ug/m ³		<2.0			NA	25	
Methyl tert-butyl ether	< 1.8	1.8	0.19	ug/m ³		<1.8			NA	25	
Methylene chloride	25.3	1.7	0.76	ug/m ³		24.4			3.53	25	
Naphthalene	< 2.6	2.6	0.47	ug/m ³		<2.6			NA	25	
n-Heptane	2.60	2.0	0.39	ug/m ³		2.51			3.72	25	
n-Hexane	5.21	1.8	0.32	ug/m ³		5.23			0.435	25	
o-Xylene	< 0.87	0.87	0.25	ug/m ³		<0.87			NA	25	
Propylene	< 0.86	0.86	0.13	ug/m ³		<0.86			NA	25	
Styrene	< 2.1	2.1	0.37	ug/m ³		<2.1			NA	25	
Tetrachloroethene	< 3.4	3.4	0.59	ug/m ³		<3.4			NA	25	
Tetrahydrofuran	< 1.5	1.5	0.56	ug/m ³		<1.5			NA	25	
Toluene	5.36	0.75	0.28	ug/m ³		4.88			9.46	25	
trans-1,2-Dichloroethene	4.31	2.0	0.38	ug/m ³		4.01			7.11	25	
trans-1,3-Dichloropropene	< 2.3	2.3	0.54	ug/m ³		<2.3			NA	25	
Trichloroethene	< 1.1	1.1	0.49	ug/m ³		<1.1			NA	25	
Trichlorofluoromethane	< 2.8	2.8	0.20	ug/m ³		<2.8			NA	25	
Trichlorotrifluoroethane	< 3.8	3.8	0.21	ug/m ³		<3.8			NA	25	
Vinyl acetate	< 1.8	1.8	0.20	ug/m ³		<1.8			NA	25	
Vinyl chloride	< 0.51	0.51	0.14	ug/m ³		<0.51			NA	25	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

TENTATIVELY IDENTIFIED COMPOUNDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2021 - TO-15

Blank (B0G2021-BLK1)

Prepared & Analyzed: 07/19/20

Tentatively Identified Compounds	ND			ug/m ³							A-02
----------------------------------	----	--	--	-------------------	--	--	--	--	--	--	------

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002768 Date Reported: 07/31/20
---	---	--

Notes and Definitions

T4	Tentatively identified compound. Concentration is estimated and based on the closest internal standard.
A-02	No tentatively identified compounds (TICs) were present above 5.0 ppbv.
<	Less than value listed
NA	Not applicable. The %RPD is not calculated from values less than the reporting limit.
MDL	Method Detection Limit
RL	Reporting Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)

2017/6/8

Chain of Custody for Air Canisters

- BARR**
- Ann Arbor
 - Duluth
 - Jefferson City
 - Bismarck
 - Hibbing
 - Minneapolis

- Sample Origination State:
- KS MO WI
 - MI ND Other: _____
 - MN SD

Analysis Requested:
 TO-14 TO-15 TO-15SIM
 3C Other

COC Number: **No 50195**
 COC 1 of 1

REPORT TO	INVOICE TO
Company: <u>Barr Eng.</u>	Company: <u>Same</u>
Address:	Address:
Name: <u>Andreea Nord</u>	Name:
email: <u>anord@barr.com</u>	email:
Copy to: <u>datamgt@barr.com</u>	P.O.:
Project Name: <u>Bryn Mawr</u>	Barr Project No: <u>23271806</u>

Lab Deliverable Contents:
 (check all that apply)

- Sample Data with QC
- TIC Library Search
- Sample Chromatograms
- Individual Canister Certification Data

EDD:
 EQUIS EQUIS-LITE
 TIC results in EDD
 Other: _____

Matrix Code:
 AA = Ambient Air (Indoor/Outdoor)
 SV = Soil Vapor/Landfill Gas/SVE
 Other: _____

Location	Canister		Flow Controller Serial #	Vacuum		Collection Date (mm/dd/yyyy)	Collection Time		Total Time (w/w)	Matrix Code	PID Reading (ppm/ppb)	Sample Comments
	Serial #	Size		Initial	Final		Start (hh:mm)	Stop (hh:mm)				
1. <u>SG-01-20</u>	<u>00381</u>	<u>1.4</u>	<u>30</u>	<u>30</u>	<u>3</u>	<u>07/16/2020</u>	<u>8:02</u>	<u>8:36</u>	<u>34</u>	<u>SV</u>	<u>1.0</u>	<u>EPA TO-15</u>
2. <u>SG-02-20</u>	<u>3476</u>	<u>1.4</u>	<u>37</u>	<u>27</u>	<u>2</u>	<u>07/16/2020</u>	<u>8:27</u>	<u>8:34</u>	<u>7</u>	<u>SV</u>	<u>0.7</u>	<u>EPA TO-15</u>
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												

BARR USE ONLY		Relinquished by: <u>[Signature]</u>	Date: <u>7/16</u>	Time: <u>9:35</u>	Received by: <u>[Signature]</u>	Date: <u>7/16/20</u>	Time: <u>9:35</u>
Sampled by: <u>ARPL/AKSB</u>		Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Barr Proj. Manager: <u>Senni Brekken</u>		Samples Shipped VIA: <input type="checkbox"/> Courier <input type="checkbox"/> Federal Express <input type="checkbox"/> Sampler		Air Bill Number:		Requested Due Date:	
Barr DQ Manager: <u>Andreea Nord</u>		<input type="checkbox"/> Other: _____				<input checked="" type="checkbox"/> Standard Turn Around Time	
Lab Name: <u>Legend</u>		Custody Seal Intact? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> None				<input type="checkbox"/> Rush (min/dd/yyyy)	
Lab Location: <u>Saint Paul</u>		Lab WO: _____					

Distribution - White-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Pink Copy: Send to Data Management Administrators.

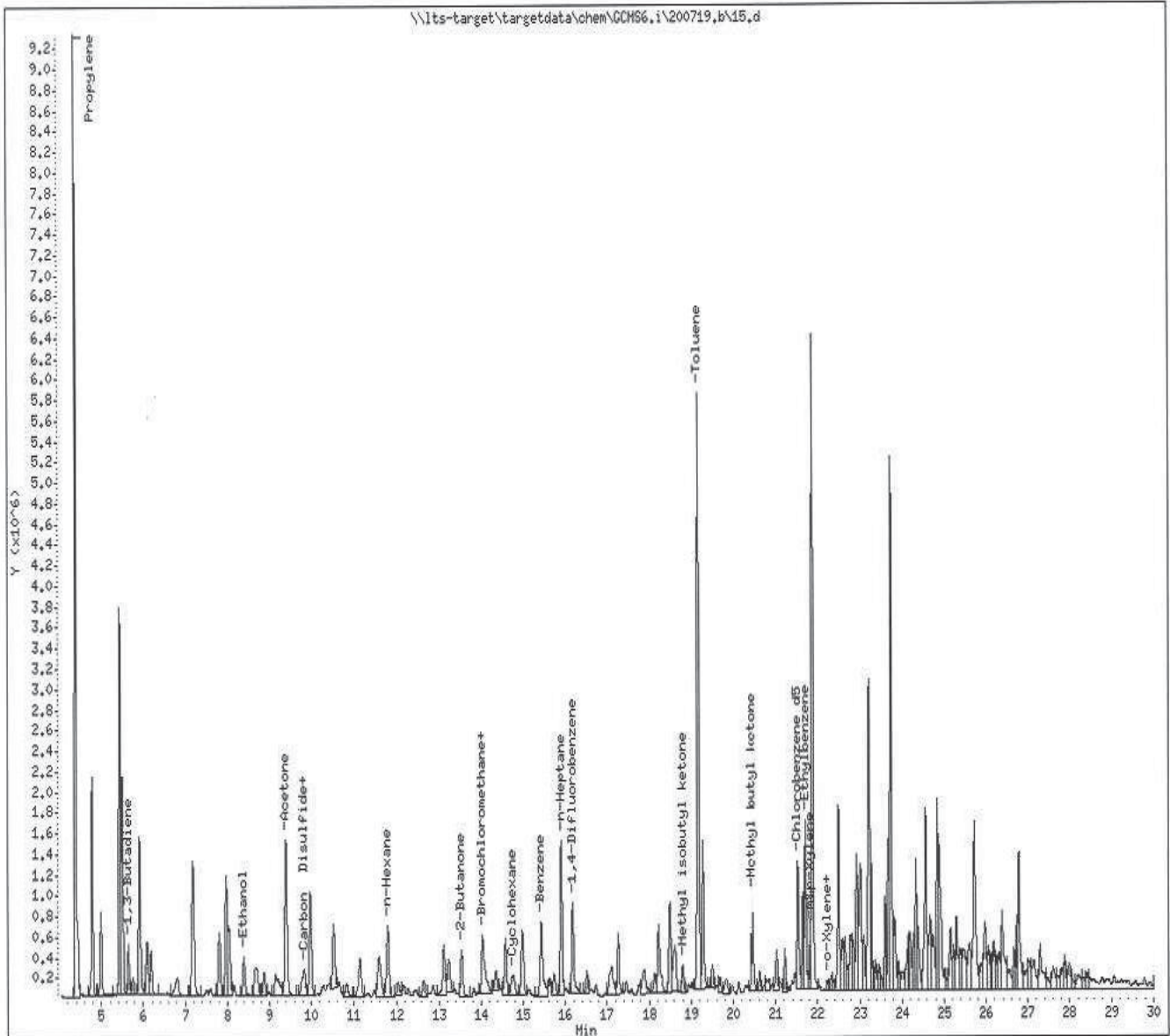
[Signature]

H:\RUG\STDFORMS\Chain of Custody for Air Canisters Form 2015 - RUG Rev. 06/16/15

Data File: \\its-target\targetdata\chem\GCH56.i\200719,b\15,d
 Date : 20-JUL-2020 04:29
 Client ID: SG-01-20
 Sample Info: 2002768-01
 Purge Volume: 1.0
 Column phase:

Page 1

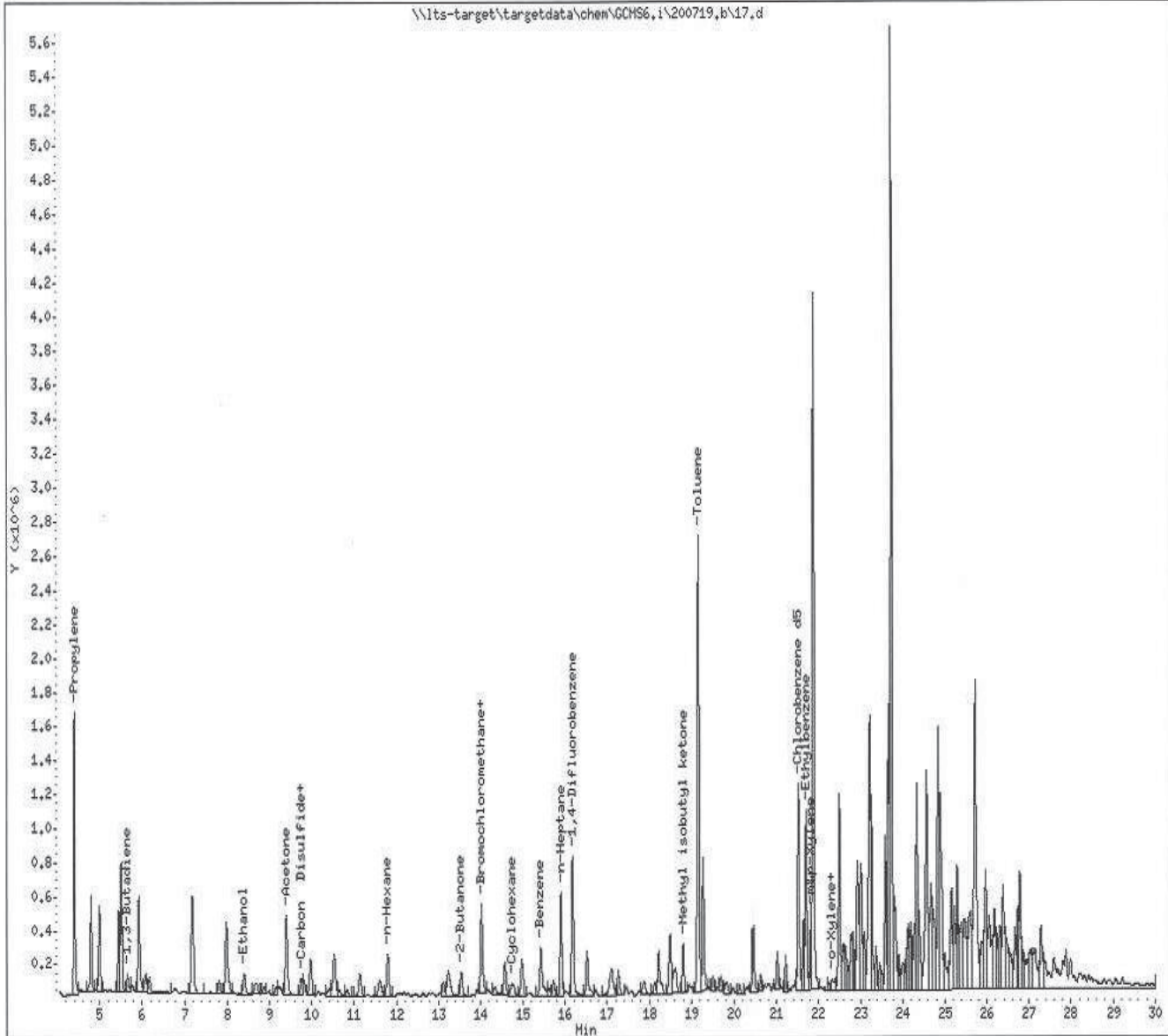
Instrument: GCH56.i
 Operator: SLH
 Column diameter: 0.20



Data File: \\its-target\targetdata\chem\GCHS6.i\200719.b\17.d
 Date : 20-JUL-2020 06:26
 Client ID: SG-02-20
 Sample Info: 2002768-02
 Purge Volume: 1.0
 Column phase:

Page 1

Instrument: GCHS6.i
 Operator: SLH
 Column diameter: 0.20





88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

July 28, 2020

Ms. Andrea Nord
Barr Engineering Co.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435

Work Order Number: 2002789
RE: 23271806

Enclosed are the results of analyses for samples received by the laboratory on 07/17/20. If you have any questions concerning this report, please feel free to contact me.

Results are not blank corrected unless noted within the report. Additionally, all QC results meet requirements unless noted.

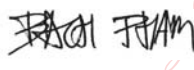
The results in this report apply to the samples as received.

All samples will be retained by Legend Technical Services, Inc., unless consumed in the analysis, at ambient conditions for 30 days from the date of this report and then discarded unless other arrangements are made. All samples were received in acceptable condition unless otherwise noted.

All test results and QC meet requirements of the 2003 NELAC standard.

MDH (NELAP) Accreditation #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC

 Digitally signed by Bach Pham
DN: cn=Bach Pham, o, ou,
email=bpham@legend-group.com,
c=US
Date: 2020.07.28 16:50:47 -05'00'

Bach Pham
Client Manager II
bpham@legend-group.com

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TE-01-20_0-3.5	2002789-01	Soil	07/16/20 10:00	07/17/20 15:56
TE-03-20_0-1.5	2002789-02	Soil	07/16/20 12:30	07/17/20 15:56
TE-04-20_0-4	2002789-03	Soil	07/16/20 13:30	07/17/20 15:56
TE-06-20_4-9	2002789-04	Soil	07/16/20 16:00	07/17/20 15:56
TE-06-20_6-6	2002789-05	Soil	07/16/20 16:00	07/17/20 15:56
TE-07-20_4-9	2002789-06	Soil	07/16/20 17:00	07/17/20 15:56
TE-07-20_8-8	2002789-07	Soil	07/16/20 17:00	07/17/20 15:56
TE-10-20_0-3	2002789-08	Soil	07/17/20 09:50	07/17/20 15:56
TE-13-20_3-7	2002789-09	Soil	07/17/20 12:40	07/17/20 15:56
TE-13-20_3.5-3.5	2002789-10	Soil	07/17/20 12:40	07/17/20 15:56
TE-15-20_0-5	2002789-11	Soil	07/17/20 14:20	07/17/20 15:56
Trip Blank	2002789-12	Methanol	07/17/20 00:00	07/17/20 15:56

Shipping Container Information

Default Cooler Temperature (°C): 11.0

Received on ice: Yes Temperature blank was present Received on ice pack: No
 Received on melt water: No Ambient: No Acceptable (IH/ISO only): No
 Custody seals: No

Case Narrative:

Per the client's instructions, the % Solids results from samples that shared the same sample times were used for samples missing snap caps.

The spike recoveries for all analytes except Silver were below laboratory acceptance limits in the 6010D batch B0G2012 MS, and the spike recoveries for all analytes were below laboratory acceptance limits in the MSD. All remaining spike recoveries were within acceptance limits in the batch LCS/LCSD. The MS/MSD source sample was not associated with this work order.

Recovery for the DRO surrogate was above laboratory limits for sample TE-06-20_4-9 due to matrix interference. All surrogates were within laboratory limits in the batch B0G2110 QC.

The DRO chromatograms are attached for all soil samples except TE-04-20_0-4.

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-01-20_0-3.5 (2002789-01) Soil Sampled: 07/16/20 10:00 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	7.6	6.4	3.1	mg/kg dry	1	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	103			56.8-136 %		"	"	"	"	
TE-03-20_0-1.5 (2002789-02) Soil Sampled: 07/16/20 12:30 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	8.5	6.9	3.4	mg/kg dry	1	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	105			56.8-136 %		"	"	"	"	
TE-04-20_0-4 (2002789-03) Soil Sampled: 07/16/20 13:30 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	<7.3	7.3	3.5	mg/kg dry	1	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	
Surrogate: Triacontane (C-30) (Silica Gel)	106			56.8-136 %		"	"	"	"	
TE-06-20_4-9 (2002789-04) Soil Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	1400	240	120	mg/kg dry	40	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	234			56.8-136 %		"	"	"	"	S-04
TE-07-20_4-9 (2002789-06) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	630	70	34	mg/kg dry	10	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	D-04
Surrogate: Triacontane (C-30) (Silica Gel)	101			56.8-136 %		"	"	"	"	
TE-10-20_0-3 (2002789-08) Soil Sampled: 07/17/20 09:50 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	120	13	6.5	mg/kg dry	2	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	93.9			56.8-136 %		"	"	"	"	
TE-13-20_3-7 (2002789-09) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	760	68	33	mg/kg dry	10	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	93.8			56.8-136 %		"	"	"	"	
TE-15-20_0-5 (2002789-11) Soil Sampled: 07/17/20 14:20 Received: 07/17/20 15:56										
DRO (Silica Gel Cleanup)	48	6.9	3.4	mg/kg dry	1	B0G2110	07/21/20	07/22/20	WI(95)DRO(M)	L1
Surrogate: Triacontane (C-30) (Silica Gel)	99.3			56.8-136 %		"	"	07/22/20	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-06-20_6-6 (2002789-05) Soil Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
Gasoline range organics	34	5.4	1.8	mg/kg dry	1	B0G2105	07/21/20	07/22/20	WI(95) GRO	H
Surrogate: 4-Fluorochlorobenzene	115			80-150 %		"	"	"	"	
TE-07-20_8-8 (2002789-07) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
Gasoline range organics	<5.7	5.7	1.9	mg/kg dry	1	B0G2105	07/21/20	07/22/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	107			80-150 %		"	"	"	"	
TE-13-20_3.5-3.5 (2002789-10) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
Gasoline range organics	6.4	5.6	1.9	mg/kg dry	1	B0G2105	07/21/20	07/22/20	WI(95) GRO	H
Surrogate: 4-Fluorochlorobenzene	108			80-150 %		"	"	"	"	
Trip Blank (2002789-12) Methanol Sampled: 07/17/20 00:00 Received: 07/17/20 15:56										
Gasoline range organics	<5.0	5.0	1.7	mg/kg wet	1	B0G2105	07/21/20	07/21/20	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	101			80-150 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	----	-----	-------	----------	-------	----------	----------	--------	-------

TE-01-20_0-3.5 (2002789-01) Soil **Sampled: 07/16/20 10:00** **Received: 07/17/20 15:56**

Arsenic	5.0	1.1	0.70	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	70	1.1	0.051	mg/kg dry	1	"	"	"	"	
Cadmium	0.23	0.055	0.012	mg/kg dry	1	"	"	"	"	
Chromium	10	0.55	0.022	mg/kg dry	1	"	"	"	"	
Lead	39	0.82	0.10	mg/kg dry	1	"	"	"	"	
Mercury	<0.55	0.55	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.55	0.55	0.045	mg/kg dry	1	"	"	"	"	

TE-03-20_0-1.5 (2002789-02) Soil **Sampled: 07/16/20 12:30** **Received: 07/17/20 15:56**

Arsenic	5.5	1.1	0.68	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	110	1.1	0.049	mg/kg dry	1	"	"	"	"	
Cadmium	0.23	0.053	0.012	mg/kg dry	1	"	"	"	"	
Chromium	11	0.53	0.021	mg/kg dry	1	"	"	"	"	
Lead	50	0.80	0.10	mg/kg dry	1	"	"	"	"	
Mercury	<0.53	0.53	0.18	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.32	mg/kg dry	1	"	"	"	"	
Silver	<0.53	0.53	0.044	mg/kg dry	1	"	"	"	"	

TE-04-20_0-4 (2002789-03) Soil **Sampled: 07/16/20 13:30** **Received: 07/17/20 15:56**

Arsenic	2.2	1.1	0.70	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	21	1.1	0.050	mg/kg dry	1	"	"	"	"	
Cadmium	<0.054	0.054	0.012	mg/kg dry	1	"	"	"	"	
Chromium	8.0	0.54	0.022	mg/kg dry	1	"	"	"	"	
Lead	8.8	0.82	0.10	mg/kg dry	1	"	"	"	"	
Mercury	<0.54	0.54	0.18	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.54	0.54	0.045	mg/kg dry	1	"	"	"	"	

TE-06-20_4-9 (2002789-04) Soil **Sampled: 07/16/20 16:00** **Received: 07/17/20 15:56**

Arsenic	1.7	1.1	0.69	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	31	1.1	0.049	mg/kg dry	1	"	"	"	"	
Cadmium	0.51	0.054	0.012	mg/kg dry	1	"	"	"	"	
Chromium	6.0	0.54	0.022	mg/kg dry	1	"	"	"	"	
Lead	560	0.81	0.10	mg/kg dry	1	"	"	"	"	
Mercury	<0.54	0.54	0.18	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.32	mg/kg dry	1	"	"	"	"	
Silver	<0.54	0.54	0.044	mg/kg dry	1	"	"	"	"	

TE-07-20_4-9 (2002789-06) Soil **Sampled: 07/16/20 17:00** **Received: 07/17/20 15:56**

Arsenic	2.3	1.1	0.73	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
----------------	------------	-----	------	-----------	---	---------	----------	----------	-----------	--

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-07-20_4-9 (2002789-06) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
Barium	44	1.1	0.052	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Cadmium	0.43	0.057	0.012	mg/kg dry	1	"	"	"	"	
Chromium	8.5	0.57	0.023	mg/kg dry	1	"	"	"	"	
Lead	210	0.85	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.57	0.57	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.57	0.57	0.047	mg/kg dry	1	"	"	"	"	
TE-10-20_0-3 (2002789-08) Soil Sampled: 07/17/20 09:50 Received: 07/17/20 15:56										
Arsenic	4.3	1.1	0.72	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	50	1.1	0.052	mg/kg dry	1	"	"	"	"	
Cadmium	0.37	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	9.3	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	160	0.84	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	
TE-13-20_3-7 (2002789-09) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
Arsenic	4.6	1.1	0.72	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	64	1.1	0.052	mg/kg dry	1	"	"	"	"	
Cadmium	0.96	0.056	0.012	mg/kg dry	1	"	"	"	"	
Chromium	15	0.56	0.022	mg/kg dry	1	"	"	"	"	
Lead	510	0.84	0.11	mg/kg dry	1	"	"	"	"	
Mercury	<0.56	0.56	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.8	2.8	0.34	mg/kg dry	1	"	"	"	"	
Silver	<0.56	0.56	0.046	mg/kg dry	1	"	"	"	"	
TE-15-20_0-5 (2002789-11) Soil Sampled: 07/17/20 14:20 Received: 07/17/20 15:56										
Arsenic	2.6	1.1	0.70	mg/kg dry	1	B0G2012	07/20/20	07/23/20	EPA 6010D	
Barium	37	1.1	0.051	mg/kg dry	1	"	"	"	"	
Cadmium	0.34	0.055	0.012	mg/kg dry	1	"	"	"	"	
Chromium	11	0.55	0.022	mg/kg dry	1	"	"	"	"	
Lead	190	0.82	0.10	mg/kg dry	1	"	"	"	"	
Mercury	<0.55	0.55	0.19	mg/kg dry	1	"	"	"	"	
Selenium	<2.7	2.7	0.33	mg/kg dry	1	"	"	"	"	
Silver	<0.55	0.55	0.045	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-01-20_0-3.5 (2002789-01) Soil Sampled: 07/16/20 10:00 Received: 07/17/20 15:56										
2-Chloronaphthalene	<0.36	0.36	0.040	mg/kg dry	1	B0G2005	07/20/20	07/24/20	EPA 8270E	
2-Methylnaphthalene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.36	0.36	0.041	mg/kg dry	1	"	"	"	"	
Anthracene	<0.36	0.36	0.046	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.36	0.36	0.065	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.36	0.36	0.051	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.36	0.36	0.070	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.36	0.36	0.041	mg/kg dry	1	"	"	"	"	
Chrysene	<0.36	0.36	0.059	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.36	0.36	0.047	mg/kg dry	1	"	"	"	"	
Fluoranthene	0.48	0.36	0.059	mg/kg dry	1	"	"	"	"	
Fluorene	<0.36	0.36	0.048	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.36	0.36	0.048	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.36	0.36	0.037	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.36	0.36	0.049	mg/kg dry	1	"	"	"	"	
Pyrene	0.59	0.36	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	67.9			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	61.6			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	88.2			36.6-110 %		"	"	"	"	

TE-03-20_0-1.5 (2002789-02) Soil Sampled: 07/16/20 12:30 Received: 07/17/20 15:56										
2-Chloronaphthalene	<0.35	0.35	0.038	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.35	0.35	0.038	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.35	0.35	0.038	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.35	0.35	0.039	mg/kg dry	1	"	"	"	"	
Anthracene	<0.35	0.35	0.045	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.35	0.35	0.038	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.35	0.35	0.049	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.35	0.35	0.039	mg/kg dry	1	"	"	"	"	
Chrysene	<0.35	0.35	0.057	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.35	0.35	0.046	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.35	0.35	0.057	mg/kg dry	1	"	"	"	"	
Fluorene	<0.35	0.35	0.047	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.35	0.35	0.047	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.35	0.35	0.036	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.35	0.35	0.048	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	----	-----	-------	----------	-------	----------	----------	--------	-------

TE-03-20_0-1.5 (2002789-02) Soil **Sampled: 07/16/20 12:30** **Received: 07/17/20 15:56**

Pyrene	<0.35	0.35	0.061	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
Surrogate: 2-Fluorobiphenyl	57.6			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	51.3			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	88.1			36.6-110 %		"	"	"	"	

TE-04-20_0-4 (2002789-03) Soil **Sampled: 07/16/20 13:30** **Received: 07/17/20 15:56**

2-Chloronaphthalene	<0.36	0.36	0.039	mg/kg dry	1	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<0.36	0.36	0.039	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.36	0.36	0.039	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Anthracene	<0.36	0.36	0.046	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.36	0.36	0.064	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.36	0.36	0.039	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.36	0.36	0.050	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.36	0.36	0.070	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.36	0.36	0.040	mg/kg dry	1	"	"	"	"	
Chrysene	<0.36	0.36	0.059	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.36	0.36	0.047	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.36	0.36	0.059	mg/kg dry	1	"	"	"	"	
Fluorene	<0.36	0.36	0.048	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.36	0.36	0.048	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.36	0.36	0.037	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.36	0.36	0.049	mg/kg dry	1	"	"	"	"	
Pyrene	<0.36	0.36	0.062	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	59.5			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	56.3			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	87.4			36.6-110 %		"	"	"	"	

TE-06-20_4-9 (2002789-04) Soil **Sampled: 07/16/20 16:00** **Received: 07/17/20 15:56**

2-Chloronaphthalene	<1.4	1.4	0.15	mg/kg dry	4	B0G2005	07/20/20	07/21/20	EPA 8270E	D1
2-Methylnaphthalene	<1.4	1.4	0.15	mg/kg dry	4	"	"	"	"	
Acenaphthene	<1.4	1.4	0.15	mg/kg dry	4	"	"	"	"	
Acenaphthylene	<1.4	1.4	0.16	mg/kg dry	4	"	"	"	"	
Anthracene	<1.4	1.4	0.18	mg/kg dry	4	"	"	"	"	
Benzo(a)anthracene	1.5	1.4	0.25	mg/kg dry	4	"	"	"	"	
Benzo(a)pyrene	<1.4	1.4	0.15	mg/kg dry	4	"	"	"	"	
Benzo(b)fluoranthene	1.9	1.4	0.20	mg/kg dry	4	"	"	"	"	
Benzo(g,h,i)perylene	<1.4	1.4	0.28	mg/kg dry	4	"	"	"	"	
Benzo(k)fluoranthene	<1.4	1.4	0.16	mg/kg dry	4	"	"	"	"	
Chrysene	1.9	1.4	0.23	mg/kg dry	4	"	"	"	"	
Dibenz(a,h)anthracene	<1.4	1.4	0.18	mg/kg dry	4	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-06-20_4-9 (2002789-04) Soil										D1
Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
Fluoranthene	3.5	1.4	0.23	mg/kg dry	4	B0G2005	07/20/20	07/21/20	EPA 8270E	
Fluorene	<1.4	1.4	0.19	mg/kg dry	4	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<1.4	1.4	0.19	mg/kg dry	4	"	"	"	"	
Naphthalene	<1.4	1.4	0.15	mg/kg dry	4	"	"	"	"	
Phenanthrene	2.7	1.4	0.19	mg/kg dry	4	"	"	"	"	
Pyrene	3.0	1.4	0.25	mg/kg dry	4	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	63.5			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	61.0			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	75.4			36.6-110 %		"	"	"	"	
TE-07-20_4-9 (2002789-06) Soil										D1
Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
2-Chloronaphthalene	<1.9	1.9	0.20	mg/kg dry	5	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<1.9	1.9	0.20	mg/kg dry	5	"	"	"	"	
Acenaphthene	<1.9	1.9	0.20	mg/kg dry	5	"	"	"	"	
Acenaphthylene	<1.9	1.9	0.21	mg/kg dry	5	"	"	"	"	
Anthracene	<1.9	1.9	0.24	mg/kg dry	5	"	"	"	"	
Benzo(a)anthracene	<1.9	1.9	0.34	mg/kg dry	5	"	"	"	"	
Benzo(a)pyrene	<1.9	1.9	0.20	mg/kg dry	5	"	"	"	"	
Benzo(b)fluoranthene	<1.9	1.9	0.26	mg/kg dry	5	"	"	"	"	
Benzo(g,h,i)perylene	<1.9	1.9	0.36	mg/kg dry	5	"	"	"	"	
Benzo(k)fluoranthene	<1.9	1.9	0.21	mg/kg dry	5	"	"	"	"	
Chrysene	<1.9	1.9	0.31	mg/kg dry	5	"	"	"	"	
Dibenz(a,h)anthracene	<1.9	1.9	0.24	mg/kg dry	5	"	"	"	"	
Fluoranthene	2.4	1.9	0.31	mg/kg dry	5	"	"	"	"	
Fluorene	<1.9	1.9	0.25	mg/kg dry	5	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<1.9	1.9	0.25	mg/kg dry	5	"	"	"	"	
Naphthalene	<1.9	1.9	0.19	mg/kg dry	5	"	"	"	"	
Phenanthrene	1.9	1.9	0.26	mg/kg dry	5	"	"	"	"	
Pyrene	2.0	1.9	0.32	mg/kg dry	5	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	64.3			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	55.9			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	82.7			36.6-110 %		"	"	"	"	
TE-10-20_0-3 (2002789-08) Soil										D1
Sampled: 07/17/20 09:50 Received: 07/17/20 15:56										
2-Chloronaphthalene	<1.5	1.5	0.16	mg/kg dry	4	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Acenaphthene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Acenaphthylene	<1.5	1.5	0.17	mg/kg dry	4	"	"	"	"	
Anthracene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Benzo(a)anthracene	<1.5	1.5	0.27	mg/kg dry	4	"	"	"	"	
Benzo(a)pyrene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-10-20_0-3 (2002789-08) Soil										D1
Sampled: 07/17/20 09:50 Received: 07/17/20 15:56										
Benzo(b)fluoranthene	<1.5	1.5	0.21	mg/kg dry	4	B0G2005	07/20/20	07/21/20	EPA 8270E	
Benzo(g,h,i)perylene	<1.5	1.5	0.29	mg/kg dry	4	"	"	"	"	
Benzo(k)fluoranthene	<1.5	1.5	0.17	mg/kg dry	4	"	"	"	"	
Chrysene	<1.5	1.5	0.24	mg/kg dry	4	"	"	"	"	
Dibenz(a,h)anthracene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Fluoranthene	<1.5	1.5	0.24	mg/kg dry	4	"	"	"	"	
Fluorene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Naphthalene	<1.5	1.5	0.15	mg/kg dry	4	"	"	"	"	
Phenanthrene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Pyrene	<1.5	1.5	0.26	mg/kg dry	4	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	56.2			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	53.3			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	69.1			36.6-110 %		"	"	"	"	

TE-13-20_3-7 (2002789-09) Soil										D1
Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
2-Chloronaphthalene	<1.5	1.5	0.16	mg/kg dry	4	B0G2005	07/20/20	07/21/20	EPA 8270E	
2-Methylnaphthalene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Acenaphthene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Acenaphthylene	<1.5	1.5	0.17	mg/kg dry	4	"	"	"	"	
Anthracene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Benzo(a)anthracene	<1.5	1.5	0.27	mg/kg dry	4	"	"	"	"	
Benzo(a)pyrene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Benzo(b)fluoranthene	1.6	1.5	0.21	mg/kg dry	4	"	"	"	"	
Benzo(g,h,i)perylene	<1.5	1.5	0.29	mg/kg dry	4	"	"	"	"	
Benzo(k)fluoranthene	<1.5	1.5	0.17	mg/kg dry	4	"	"	"	"	
Chrysene	1.5	1.5	0.24	mg/kg dry	4	"	"	"	"	
Dibenz(a,h)anthracene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Fluoranthene	2.8	1.5	0.24	mg/kg dry	4	"	"	"	"	
Fluorene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Naphthalene	<1.5	1.5	0.15	mg/kg dry	4	"	"	"	"	
Phenanthrene	2.1	1.5	0.20	mg/kg dry	4	"	"	"	"	
Pyrene	2.5	1.5	0.26	mg/kg dry	4	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	62.2			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	56.2			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	76.5			36.6-110 %		"	"	"	"	

TE-15-20_0-5 (2002789-11) Soil										D1
Sampled: 07/17/20 14:20 Received: 07/17/20 15:56										
2-Chloronaphthalene	<1.5	1.5	0.16	mg/kg dry	4	B0G2005	07/20/20	07/24/20	EPA 8270E	
2-Methylnaphthalene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-15-20_0-5 (2002789-11) Soil										D1
Sampled: 07/17/20 14:20										
Received: 07/17/20 15:56										
Acenaphthene	<1.5	1.5	0.16	mg/kg dry	4	B0G2005	07/20/20	07/24/20	EPA 8270E	
Acenaphthylene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Anthracene	<1.5	1.5	0.18	mg/kg dry	4	"	"	"	"	
Benzo(a)anthracene	<1.5	1.5	0.26	mg/kg dry	4	"	"	"	"	
Benzo(a)pyrene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Benzo(b)fluoranthene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Benzo(g,h,i)perylene	<1.5	1.5	0.28	mg/kg dry	4	"	"	"	"	
Benzo(k)fluoranthene	<1.5	1.5	0.16	mg/kg dry	4	"	"	"	"	
Chrysene	<1.5	1.5	0.24	mg/kg dry	4	"	"	"	"	
Dibenz(a,h)anthracene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Fluoranthene	<1.5	1.5	0.24	mg/kg dry	4	"	"	"	"	
Fluorene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<1.5	1.5	0.19	mg/kg dry	4	"	"	"	"	
Naphthalene	<1.5	1.5	0.15	mg/kg dry	4	"	"	"	"	
Phenanthrene	<1.5	1.5	0.20	mg/kg dry	4	"	"	"	"	
Pyrene	1.6	1.5	0.25	mg/kg dry	4	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	67.4			54.8-85.5 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	60.4			50.7-84.5 %		"	"	"	"	
Surrogate: Terphenyl-d14	87.1			36.6-110 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-01-20_0-3.5 (2002789-01) Soil Sampled: 07/16/20 10:00 Received: 07/17/20 15:56										
% Solids	91			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-03-20_0-1.5 (2002789-02) Soil Sampled: 07/16/20 12:30 Received: 07/17/20 15:56										
% Solids	94			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-04-20_0-4 (2002789-03) Soil Sampled: 07/16/20 13:30 Received: 07/17/20 15:56										
% Solids	92			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-06-20_4-9 (2002789-04) Soil Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
% Solids	93			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-06-20_6-6 (2002789-05) Soil Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
% Solids	93			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-07-20_4-9 (2002789-06) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
% Solids	88			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-07-20_8-8 (2002789-07) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
% Solids	88			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-10-20_0-3 (2002789-08) Soil Sampled: 07/17/20 09:50 Received: 07/17/20 15:56										
% Solids	89			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-13-20_3-7 (2002789-09) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
% Solids	89			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-13-20_3.5-3.5 (2002789-10) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
% Solids	89			%	1	B0G2412	07/24/20	07/24/20	% calculation	
TE-15-20_0-5 (2002789-11) Soil Sampled: 07/17/20 14:20 Received: 07/17/20 15:56										
% Solids	91			%	1	B0G2412	07/24/20	07/24/20	% calculation	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-06-20_6-6 (2002789-05) Soil Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
1,1,1,2-Tetrachloroethane	<0.22	0.22	0.012	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.22	0.22	0.0099	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.22	0.22	0.0057	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.54	0.54	0.033	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.54	0.54	0.034	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	0.31	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.54	0.54	0.025	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.22	0.22	0.0087	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.22	0.22	0.0076	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.042	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.058	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.22	0.22	0.0095	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.22	0.22	0.0092	mg/kg dry	1	"	"	"	"	
Bromoform	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.22	0.22	0.052	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.22	0.22	0.0063	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
Chloroform	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.22	0.22	0.014	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-06-20_6-6 (2002789-05) Soil Sampled: 07/16/20 16:00 Received: 07/17/20 15:56										
cis-1,3-Dichloropropene	<0.22	0.22	0.017	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Dibromochloromethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.22	0.22	0.028	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.54	0.54	0.033	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.43	0.43	0.026	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.22	0.22	0.028	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.54	0.54	0.026	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.54	0.54	0.032	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.22	0.22	0.0080	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	1.1	0.22	0.0092	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.22	0.22	0.0057	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.22	0.22	0.0066	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.10	mg/kg dry	1	"	"	"	"	
Toluene	<0.22	0.22	0.0091	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.22	0.22	0.0037	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.22	0.22	0.026	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.9			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	86.8			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	87.7			80-120 %		"	"	"	"	

TE-07-20_8-8 (2002789-07) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
1,1,1,2-Tetrachloroethane	<0.23	0.23	0.012	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.23	0.23	0.022	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.23	0.23	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-07-20_8-8 (2002789-07) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
1,1-Dichloroethene	<0.23	0.23	0.0060	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1-Dichloropropene	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.57	0.57	0.035	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.57	0.57	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.57	0.57	0.026	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.23	0.23	0.0092	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.23	0.23	0.0081	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.23	0.23	0.014	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.23	0.23	0.031	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.044	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.23	0.23	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.061	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.23	0.23	0.010	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.23	0.23	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.23	0.23	0.0098	mg/kg dry	1	"	"	"	"	
Bromoform	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.23	0.23	0.055	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.23	0.23	0.0067	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.23	0.23	0.022	mg/kg dry	1	"	"	"	"	
Chloroform	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.23	0.23	0.015	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.23	0.23	0.022	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.23	0.23	0.030	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.23	0.23	0.014	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-07-20_8-8 (2002789-07) Soil Sampled: 07/16/20 17:00 Received: 07/17/20 15:56										
Ethylbenzene	<0.23	0.23	0.010	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Hexachlorobutadiene	<0.57	0.57	0.035	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.45	0.45	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.23	0.23	0.030	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.23	0.23	0.016	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.57	0.57	0.027	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.57	0.57	0.034	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.23	0.23	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.23	0.23	0.0084	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.23	0.23	0.0098	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.23	0.23	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.23	0.23	0.0060	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.23	0.23	0.0069	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.23	0.23	0.0097	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.23	0.23	0.014	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.23	0.23	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.23	0.23	0.0039	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.23	0.23	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.23	0.23	0.027	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	91.8			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	88.7			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	88.6			80-120 %		"	"	"	"	

TE-13-20_3.5-3.5 (2002789-10) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
1,1,1,2-Tetrachloroethane	<0.22	0.22	0.012	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.22	0.22	0.0060	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.035	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.036	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	----	-----	-------	----------	-------	----------	----------	--------	-------

TE-13-20_3.5-3.5 (2002789-10) Soil **Sampled: 07/17/20 12:40** **Received: 07/17/20 15:56**

1,2-Dibromo-3-chloropropane	<0.56	0.56	0.026	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,2-Dibromoethane (EDB)	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.22	0.22	0.0091	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.22	0.22	0.0080	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.22	0.22	0.030	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.1	1.1	0.044	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.22	0.22	0.017	mg/kg dry	1	"	"	"	"	
Acetone	<1.1	1.1	0.061	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.22	0.22	0.0099	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.22	0.22	0.019	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
Bromoform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.22	0.22	0.054	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.22	0.22	0.0066	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Chloroform	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.22	0.22	0.015	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.22	0.22	0.021	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	T5
Ethyl ether	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.22	0.22	0.010	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.56	0.56	0.035	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.45	0.45	0.027	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.22	0.22	0.029	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.22	0.22	0.016	mg/kg dry	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TE-13-20_3.5-3.5 (2002789-10) Soil Sampled: 07/17/20 12:40 Received: 07/17/20 15:56										
Methylene chloride	<0.56	0.56	0.027	mg/kg dry	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Naphthalene	<0.56	0.56	0.034	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.22	0.22	0.020	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.22	0.22	0.0083	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.22	0.22	0.0097	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.22	0.22	0.012	mg/kg dry	1	"	"	"	"	
Styrene	<0.22	0.22	0.0060	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.22	0.22	0.0069	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.1	1.1	0.11	mg/kg dry	1	"	"	"	"	
Toluene	<0.22	0.22	0.0096	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.22	0.22	0.013	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.22	0.22	0.011	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.22	0.22	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.22	0.22	0.018	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.22	0.22	0.027	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	89.9			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	88.7			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	89.9			80-120 %		"	"	"	"	

Trip Blank (2002789-12) Methanol Sampled: 07/17/20 00:00 Received: 07/17/20 15:56										
1,1,1,2-Tetrachloroethane	<0.20	0.20	0.011	mg/kg wet	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,1,1-Trichloroethane	<0.20	0.20	0.019	mg/kg wet	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
1,1,2-Trichloroethane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.20	0.20	0.018	mg/kg wet	1	"	"	"	"	
1,1-Dichloroethane	<0.20	0.20	0.0092	mg/kg wet	1	"	"	"	"	
1,1-Dichloroethene	<0.20	0.20	0.0053	mg/kg wet	1	"	"	"	"	
1,1-Dichloropropene	<0.20	0.20	0.013	mg/kg wet	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.50	0.50	0.031	mg/kg wet	1	"	"	"	"	
1,2,3-Trichloropropane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.50	0.50	0.032	mg/kg wet	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.50	0.50	0.023	mg/kg wet	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.20	0.20	0.013	mg/kg wet	1	"	"	"	"	
1,2-Dichlorobenzene	<0.20	0.20	0.0081	mg/kg wet	1	"	"	"	"	
1,2-Dichloroethane	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
1,2-Dichloropropane	<0.20	0.20	0.0071	mg/kg wet	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.20	0.20	0.012	mg/kg wet	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (2002789-12) Methanol Sampled: 07/17/20 00:00 Received: 07/17/20 15:56										
1,3-Dichlorobenzene	<0.20	0.20	0.013	mg/kg wet	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
1,3-Dichloropropane	<0.20	0.20	0.0090	mg/kg wet	1	"	"	"	"	
1,4-Dichlorobenzene	<0.20	0.20	0.0098	mg/kg wet	1	"	"	"	"	
2,2-Dichloropropane	<0.20	0.20	0.027	mg/kg wet	1	"	"	"	"	
2-Butanone	<1.0	1.0	0.039	mg/kg wet	1	"	"	"	"	
2-Chlorotoluene	<0.20	0.20	0.0090	mg/kg wet	1	"	"	"	"	
4-Chlorotoluene	<0.20	0.20	0.015	mg/kg wet	1	"	"	"	"	
Acetone	<1.0	1.0	0.054	mg/kg wet	1	"	"	"	"	
Allyl chloride	<0.20	0.20	0.010	mg/kg wet	1	"	"	"	"	
Benzene	<0.20	0.20	0.0088	mg/kg wet	1	"	"	"	"	
Bromobenzene	<0.20	0.20	0.017	mg/kg wet	1	"	"	"	"	
Bromochloromethane	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Bromodichloromethane	<0.20	0.20	0.0086	mg/kg wet	1	"	"	"	"	
Bromoform	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Bromomethane	<0.20	0.20	0.048	mg/kg wet	1	"	"	"	"	
Carbon tetrachloride	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
Chlorobenzene	<0.20	0.20	0.0059	mg/kg wet	1	"	"	"	"	
Chloroethane	<0.20	0.20	0.019	mg/kg wet	1	"	"	"	"	
Chloroform	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Chloromethane	<0.20	0.20	0.013	mg/kg wet	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.20	0.20	0.0098	mg/kg wet	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
Dibromochloromethane	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
Dibromomethane	<0.20	0.20	0.019	mg/kg wet	1	"	"	"	"	
Dichlorodifluoromethane	<0.20	0.20	0.026	mg/kg wet	1	"	"	"	"	
Dichlorofluoromethane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	T5
Ethyl ether	<0.20	0.20	0.012	mg/kg wet	1	"	"	"	"	
Ethylbenzene	<0.20	0.20	0.0089	mg/kg wet	1	"	"	"	"	
Hexachlorobutadiene	<0.50	0.50	0.031	mg/kg wet	1	"	"	"	"	
Isopropylbenzene	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
m,p-Xylene	<0.40	0.40	0.024	mg/kg wet	1	"	"	"	"	
Methyl isobutyl ketone	<0.20	0.20	0.026	mg/kg wet	1	"	"	"	"	
Methyl tert-butyl ether	<0.20	0.20	0.014	mg/kg wet	1	"	"	"	"	
Methylene chloride	<0.50	0.50	0.024	mg/kg wet	1	"	"	"	"	
Naphthalene	<0.50	0.50	0.030	mg/kg wet	1	"	"	"	"	
n-Butylbenzene	<0.20	0.20	0.011	mg/kg wet	1	"	"	"	"	
n-Propylbenzene	<0.20	0.20	0.018	mg/kg wet	1	"	"	"	"	
o-Xylene	<0.20	0.20	0.0074	mg/kg wet	1	"	"	"	"	
p-Isopropyltoluene	<0.20	0.20	0.0086	mg/kg wet	1	"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (2002789-12) Methanol Sampled: 07/17/20 00:00 Received: 07/17/20 15:56										
sec-Butylbenzene	<0.20	0.20	0.011	mg/kg wet	1	B0G2414	07/18/20	07/18/20	EPA 8260D	
Styrene	<0.20	0.20	0.0053	mg/kg wet	1	"	"	"	"	
tert-Butylbenzene	<0.20	0.20	0.0061	mg/kg wet	1	"	"	"	"	
Tetrachloroethene	<0.20	0.20	0.010	mg/kg wet	1	"	"	"	"	
Tetrahydrofuran	<1.0	1.0	0.096	mg/kg wet	1	"	"	"	"	
Toluene	<0.20	0.20	0.0085	mg/kg wet	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.20	0.20	0.012	mg/kg wet	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.20	0.20	0.010	mg/kg wet	1	"	"	"	"	
Trichloroethene	<0.20	0.20	0.0034	mg/kg wet	1	"	"	"	"	
Trichlorofluoromethane	<0.20	0.20	0.016	mg/kg wet	1	"	"	"	"	
Vinyl chloride	<0.20	0.20	0.024	mg/kg wet	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	89.0			80-120 %		"	"	"	"	
Surrogate: Dibromofluoromethane	87.5			80-120 %		"	"	"	"	
Surrogate: Toluene-d8	88.9			80-120 %		"	"	"	"	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

DRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2110 - Sonication (Wisc DRO)											
Blank (B0G2110-BLK1)											
						Prepared & Analyzed: 07/21/20					
DRO (Silica Gel Cleanup)	< 8.0	8.0	3.9	mg/kg wet							
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	20.2			mg/kg wet	16.0		126	56.8-136			
LCS (B0G2110-BS1)											
						Prepared & Analyzed: 07/21/20					
DRO (Silica Gel Cleanup)	71.0	8.0	3.9	mg/kg wet	64.0	<8.0	111	70-120			
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	17.9			mg/kg wet	16.0		112	56.8-136			
LCS Dup (B0G2110-BSD1)											
						Prepared: 07/21/20 Analyzed: 07/22/20					
DRO (Silica Gel Cleanup)	66.3	8.0	3.9	mg/kg wet	64.0	<8.0	104	70-120	6.94	20	
Surrogate: <i>Triacontane (C-30) (Silica Gel)</i>	15.6			mg/kg wet	16.0		97.2	56.8-136			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

WI(95) GRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes		
Batch B0G2105 - EPA 5035A Soil (Purge and Trap)													
Blank (B0G2105-BLK1)													
						Prepared & Analyzed: 07/21/20							
Gasoline range organics	< 5.0	5.0	1.7	mg/kg wet									
Surrogate: 4-Fluorochlorobenzene	20.0			ug/L	20.0		99.9	80-150					
LCS (B0G2105-BS1)													
						Prepared & Analyzed: 07/21/20							
Gasoline range organics	1030			ug/L	1000		103	80-120					
Surrogate: 4-Fluorochlorobenzene	22.3			ug/L	20.0		111	80-150					
LCS Dup (B0G2105-BSD1)													
						Prepared: 07/21/20			Analyzed: 07/22/20				
Gasoline range organics	993			ug/L	1000		99.3	80-120	4.17	20			
Surrogate: 4-Fluorochlorobenzene	22.2			ug/L	20.0		111	80-150					
Duplicate (B0G2105-DUP1)													
						Source: 2002788-01			Prepared: 07/21/20			Analyzed: 07/22/20	
Gasoline range organics	4.15	5.6	1.9	mg/kg dry		<5.6			NA	20			
Surrogate: 4-Fluorochlorobenzene	19.9			ug/L	20.0		99.4	80-150					

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2012 - EPA 3050B (M)

Blank (B0G2012-BLK1)

Prepared: 07/20/20 Analyzed: 07/23/20

Arsenic	< 1.0	1.0	0.64	mg/kg wet							
Barium	< 1.0	1.0	0.046	mg/kg wet							
Cadmium	< 0.050	0.050	0.011	mg/kg wet							
Chromium	< 0.50	0.50	0.020	mg/kg wet							
Lead	< 0.75	0.75	0.095	mg/kg wet							
Mercury	< 0.50	0.50	0.17	mg/kg wet							
Selenium	< 2.5	2.5	0.30	mg/kg wet							
Silver	< 0.50	0.50	0.041	mg/kg wet							

LCS (B0G2012-BS1)

Prepared: 07/20/20 Analyzed: 07/23/20

Arsenic	35.5	1.0	0.64	mg/kg wet	39.9	<1.0	89.0	80-120			
Barium	36.0	1.0	0.046	mg/kg wet	39.9	<1.0	90.3	80-120			
Cadmium	40.2	0.050	0.011	mg/kg wet	39.9	<0.050	101	80-120			
Chromium	36.4	0.50	0.020	mg/kg wet	39.9	<0.50	91.3	80-120			
Lead	38.2	0.75	0.095	mg/kg wet	39.9	<0.75	95.7	80-120			
Mercury	10.8	0.50	0.17	mg/kg wet	12.5	<0.50	86.7	80-120			
Selenium	35.5	2.5	0.30	mg/kg wet	39.9	<2.5	89.0	80-120			
Silver	3.52	0.50	0.041	mg/kg wet	3.99	<0.50	88.2	80-120			

LCS Dup (B0G2012-BSD1)

Prepared: 07/20/20 Analyzed: 07/23/20

Arsenic	36.2	1.0	0.64	mg/kg wet	39.9	<1.0	90.7	80-120	1.87	20	
Barium	36.8	1.0	0.046	mg/kg wet	39.9	<1.0	92.1	80-120	1.99	20	
Cadmium	41.0	0.050	0.011	mg/kg wet	39.9	<0.050	103	80-120	1.97	20	
Chromium	37.3	0.50	0.020	mg/kg wet	39.9	<0.50	93.6	80-120	2.48	20	
Lead	38.8	0.75	0.095	mg/kg wet	39.9	<0.75	97.3	80-120	1.62	20	
Mercury	11.0	0.50	0.17	mg/kg wet	12.5	<0.50	88.2	80-120	1.74	20	
Selenium	36.2	2.5	0.30	mg/kg wet	39.9	<2.5	90.7	80-120	1.85	20	
Silver	3.56	0.50	0.041	mg/kg wet	3.99	<0.50	89.3	80-120	1.27	20	

Matrix Spike (B0G2012-MS1)

Source: 2002788-01

Prepared: 07/20/20 Analyzed: 07/23/20

Arsenic	30.1	1.1	0.72	mg/kg dry	44.8	3.03	60.4	75-125			M2
Barium	67.5	1.1	0.052	mg/kg dry	44.8	44.7	51.1	75-125			M2
Cadmium	31.5	0.056	0.012	mg/kg dry	44.8	0.129	70.2	75-125			M2
Chromium	31.7	0.56	0.022	mg/kg dry	44.8	7.14	55.0	75-125			M2
Lead	48.6	0.84	0.11	mg/kg dry	44.8	22.8	57.7	75-125			M2
Mercury	10.3	0.56	0.19	mg/kg dry	14.0	<0.56	73.7	75-125			M2
Selenium	28.6	2.8	0.34	mg/kg dry	44.8	<2.8	63.9	75-125			M2
Silver	3.42	0.56	0.046	mg/kg dry	4.48	<0.56	76.3	75-125			

Matrix Spike Dup (B0G2012-MSD1)

Source: 2002788-01

Prepared: 07/20/20 Analyzed: 07/23/20

Arsenic	27.7	1.1	0.72	mg/kg dry	45.0	3.03	54.9	75-125	8.01	20	M2
Barium	51.9	1.1	0.052	mg/kg dry	45.0	44.7	16.2	75-125	26.1	20	M2, QR-04

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2012 - EPA 3050B (M)											
Matrix Spike Dup (B0G2012-MSD1)											
	Source: 2002788-01				Prepared: 07/20/20		Analyzed: 07/23/20				
Cadmium	29.8	0.056	0.012	mg/kg dry	45.0	0.129	66.1	75-125	5.50	20	M2
Chromium	28.7	0.56	0.022	mg/kg dry	45.0	7.14	48.0	75-125	9.98	20	M2
Lead	48.5	0.84	0.11	mg/kg dry	45.0	22.8	57.2	75-125	0.224	20	M2
Mercury	10.2	0.56	0.19	mg/kg dry	14.1	<0.56	72.2	75-125	1.61	20	M2
Selenium	26.5	2.8	0.34	mg/kg dry	45.0	<2.8	58.8	75-125	7.84	20	M2
Silver	3.36	0.56	0.046	mg/kg dry	4.50	<0.56	74.8	75-125	1.52	20	M2

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2005 - EPA 3545A ASE Extraction

Blank (B0G2005-BLK1)

Prepared: 07/20/20 Analyzed: 07/24/20

2-Chloronaphthalene	< 0.33	0.33	0.036	mg/kg wet							
2-Methylnaphthalene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthylene	< 0.33	0.33	0.037	mg/kg wet							
Anthracene	< 0.33	0.33	0.042	mg/kg wet							
Benzo(a)anthracene	< 0.33	0.33	0.059	mg/kg wet							
Benzo(a)pyrene	< 0.33	0.33	0.036	mg/kg wet							
Benzo(b)fluoranthene	< 0.33	0.33	0.046	mg/kg wet							
Benzo(g,h,i)perylene	< 0.33	0.33	0.064	mg/kg wet							
Benzo(k)fluoranthene	< 0.33	0.33	0.037	mg/kg wet							
Chrysene	< 0.33	0.33	0.054	mg/kg wet							
Dibenz(a,h)anthracene	< 0.33	0.33	0.043	mg/kg wet							
Fluoranthene	< 0.33	0.33	0.054	mg/kg wet							
Fluorene	< 0.33	0.33	0.044	mg/kg wet							
Indeno (1,2,3-cd) pyrene	< 0.33	0.33	0.044	mg/kg wet							
Naphthalene	< 0.33	0.33	0.034	mg/kg wet							
Phenanthrene	< 0.33	0.33	0.045	mg/kg wet							
Pyrene	< 0.33	0.33	0.057	mg/kg wet							
Surrogate: 2-Fluorobiphenyl	5.43			mg/kg wet	6.67		81.5	54.8-85.5			
Surrogate: Nitrobenzene-d5	5.27			mg/kg wet	6.67		79.1	50.7-84.5			
Surrogate: Terphenyl-d14	6.55			mg/kg wet	6.67		98.3	36.6-110			

LCS (B0G2005-BS1)

Prepared: 07/20/20 Analyzed: 07/24/20

Acenaphthylene	2.26	0.33	0.037	mg/kg wet	3.33	<0.33	67.7	58.2-95.8			
Anthracene	2.68	0.33	0.042	mg/kg wet	3.33	<0.33	80.3	64-98.3			
Benzo(a)anthracene	2.87	0.33	0.059	mg/kg wet	3.33	<0.33	86.2	65-99.4			
Benzo(a)pyrene	2.61	0.33	0.036	mg/kg wet	3.33	<0.33	78.3	63.7-102			
Benzo(b)fluoranthene	2.72	0.33	0.046	mg/kg wet	3.33	<0.33	81.7	62-99.1			
Benzo(g,h,i)perylene	2.20	0.33	0.064	mg/kg wet	3.33	<0.33	65.9	57.3-109			
Benzo(k)fluoranthene	2.72	0.33	0.037	mg/kg wet	3.33	<0.33	81.7	62.6-101			
Chrysene	2.93	0.33	0.054	mg/kg wet	3.33	<0.33	87.9	67.5-104			
Dibenz(a,h)anthracene	2.26	0.33	0.043	mg/kg wet	3.33	<0.33	67.9	59.8-106			
Fluoranthene	3.00	0.33	0.054	mg/kg wet	3.33	<0.33	90.0	61.8-99			
Fluorene	2.58	0.33	0.044	mg/kg wet	3.33	<0.33	77.4	62.2-99			
Indeno (1,2,3-cd) pyrene	2.29	0.33	0.044	mg/kg wet	3.33	<0.33	68.6	57-110			
Naphthalene	2.24	0.33	0.034	mg/kg wet	3.33	<0.33	67.3	55.5-92.3			
Phenanthrene	2.70	0.33	0.045	mg/kg wet	3.33	<0.33	81.0	63.8-99.9			
Surrogate: 2-Fluorobiphenyl	5.12			mg/kg wet	6.67		76.9	54.8-85.5			
Surrogate: Nitrobenzene-d5	5.45			mg/kg wet	6.67		81.8	50.7-84.5			
Surrogate: Terphenyl-d14	6.97			mg/kg wet	6.67		105	36.6-110			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PAH 8270E - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2005 - EPA 3545A ASE Extraction

Matrix Spike (B0G2005-MS1) **Source: 2002758-07** Prepared: 07/20/20 Analyzed: 07/24/20

Acenaphthylene	2.43	0.37	0.041	mg/kg dry	3.70	<0.37	65.6	37.7-105			
Anthracene	3.01	0.37	0.047	mg/kg dry	3.70	<0.37	81.4	43.2-110			
Benzo(a)anthracene	3.20	0.37	0.066	mg/kg dry	3.70	<0.37	86.3	33.3-117			
Benzo(a)pyrene	2.90	0.37	0.040	mg/kg dry	3.70	<0.37	78.2	30-120			
Benzo(b)fluoranthene	3.03	0.37	0.051	mg/kg dry	3.70	<0.37	81.7	30-123			
Benzo(g,h,i)perylene	2.46	0.37	0.071	mg/kg dry	3.70	<0.37	66.5	30-122			
Benzo(k)fluoranthene	3.04	0.37	0.041	mg/kg dry	3.70	<0.37	82.0	35.2-116			
Chrysene	3.32	0.37	0.060	mg/kg dry	3.70	<0.37	89.7	38.4-122			
Dibenz(a,h)anthracene	2.55	0.37	0.048	mg/kg dry	3.70	<0.37	68.7	30-115			
Fluoranthene	3.24	0.37	0.060	mg/kg dry	3.70	<0.37	87.3	30-133			
Fluorene	2.82	0.37	0.049	mg/kg dry	3.70	<0.37	76.0	41.4-109			
Indeno (1,2,3-cd) pyrene	2.50	0.37	0.049	mg/kg dry	3.70	<0.37	67.5	30-119			
Naphthalene	2.53	0.37	0.038	mg/kg dry	3.70	<0.37	68.3	32-104			
Phenanthrene	3.02	0.37	0.050	mg/kg dry	3.70	<0.37	81.7	30-128			
<i>Surrogate: 2-Fluorobiphenyl</i>	5.58			mg/kg dry	7.41		75.3	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	6.10			mg/kg dry	7.41		82.4	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	7.64			mg/kg dry	7.41		103	36.6-110			

Matrix Spike Dup (B0G2005-MSD1) **Source: 2002758-07** Prepared: 07/20/20 Analyzed: 07/24/20

Acenaphthylene	2.60	0.37	0.041	mg/kg dry	3.70	<0.37	70.3	37.7-105	7.01	25.7	
Anthracene	2.93	0.37	0.047	mg/kg dry	3.70	<0.37	79.2	43.2-110	2.76	24.6	
Benzo(a)anthracene	3.12	0.37	0.066	mg/kg dry	3.70	<0.37	84.1	33.3-117	2.53	24.4	
Benzo(a)pyrene	2.77	0.37	0.040	mg/kg dry	3.70	<0.37	74.8	30-120	4.49	24.1	
Benzo(b)fluoranthene	2.89	0.37	0.051	mg/kg dry	3.70	<0.37	77.9	30-123	4.75	25.7	
Benzo(g,h,i)perylene	2.36	0.37	0.071	mg/kg dry	3.70	<0.37	63.8	30-122	4.14	26.4	
Benzo(k)fluoranthene	2.95	0.37	0.041	mg/kg dry	3.70	<0.37	79.5	35.2-116	3.01	24.8	
Chrysene	3.17	0.37	0.060	mg/kg dry	3.70	<0.37	85.5	38.4-122	4.73	25.7	
Dibenz(a,h)anthracene	2.43	0.37	0.048	mg/kg dry	3.70	<0.37	65.6	30-115	4.59	25.4	
Fluoranthene	3.08	0.37	0.060	mg/kg dry	3.70	<0.37	83.0	30-133	5.06	28	
Fluorene	2.92	0.37	0.049	mg/kg dry	3.70	<0.37	78.9	41.4-109	3.74	25	
Indeno (1,2,3-cd) pyrene	2.42	0.37	0.049	mg/kg dry	3.70	<0.37	65.3	30-119	3.36	24.5	
Naphthalene	2.58	0.37	0.038	mg/kg dry	3.70	<0.37	69.8	32-104	2.14	33.3	
Phenanthrene	2.94	0.37	0.050	mg/kg dry	3.70	<0.37	79.4	30-128	2.78	29.9	
<i>Surrogate: 2-Fluorobiphenyl</i>	5.79			mg/kg dry	7.41		78.2	54.8-85.5			
<i>Surrogate: Nitrobenzene-d5</i>	6.16			mg/kg dry	7.41		83.1	50.7-84.5			
<i>Surrogate: Terphenyl-d14</i>	7.40			mg/kg dry	7.41		99.9	36.6-110			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B0G2412 - General Preparation											
Duplicate (B0G2412-DUP1)		Source: 2002846-08				Prepared & Analyzed: 07/24/20					
% Solids	80.0			%		81.0			1.24	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Blank (B0G2414-BLK1)

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	< 0.20	0.20	0.011	mg/kg wet							
1,1,1-Trichloroethane	< 0.20	0.20	0.019	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.20	0.20	0.014	mg/kg wet							
1,1,2-Trichloroethane	< 0.20	0.20	0.016	mg/kg wet							
1,1,2-Trichlorotrifluoroethane	< 0.20	0.20	0.018	mg/kg wet							
1,1-Dichloroethane	< 0.20	0.20	0.0092	mg/kg wet							
1,1-Dichloroethene	< 0.20	0.20	0.0053	mg/kg wet							
1,1-Dichloropropene	< 0.20	0.20	0.013	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.50	0.50	0.031	mg/kg wet							
1,2,3-Trichloropropane	< 0.20	0.20	0.016	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.50	0.50	0.032	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.20	0.20	0.011	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.023	mg/kg wet							
1,2-Dibromoethane (EDB)	< 0.20	0.20	0.013	mg/kg wet							
1,2-Dichlorobenzene	< 0.20	0.20	0.0081	mg/kg wet							
1,2-Dichloroethane	< 0.20	0.20	0.011	mg/kg wet							
1,2-Dichloropropane	< 0.20	0.20	0.0071	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.20	0.20	0.012	mg/kg wet							
1,3-Dichlorobenzene	< 0.20	0.20	0.013	mg/kg wet							
1,3-Dichloropropane	< 0.20	0.20	0.0090	mg/kg wet							
1,4-Dichlorobenzene	< 0.20	0.20	0.0098	mg/kg wet							
2,2-Dichloropropane	< 0.20	0.20	0.027	mg/kg wet							
2-Butanone	< 1.0	1.0	0.039	mg/kg wet							
2-Chlorotoluene	< 0.20	0.20	0.0090	mg/kg wet							
4-Chlorotoluene	< 0.20	0.20	0.015	mg/kg wet							
Acetone	< 1.0	1.0	0.054	mg/kg wet							
Allyl chloride	< 0.20	0.20	0.010	mg/kg wet							
Benzene	< 0.20	0.20	0.0088	mg/kg wet							
Bromobenzene	< 0.20	0.20	0.017	mg/kg wet							
Bromochloromethane	< 0.20	0.20	0.014	mg/kg wet							
Bromodichloromethane	< 0.20	0.20	0.0086	mg/kg wet							
Bromoform	< 0.20	0.20	0.014	mg/kg wet							
Bromomethane	< 0.20	0.20	0.048	mg/kg wet							
Carbon tetrachloride	< 0.20	0.20	0.016	mg/kg wet							
Chlorobenzene	< 0.20	0.20	0.0059	mg/kg wet							
Chloroethane	< 0.20	0.20	0.019	mg/kg wet							
Chloroform	< 0.20	0.20	0.014	mg/kg wet							
Chloromethane	< 0.20	0.20	0.013	mg/kg wet							
cis-1,2-Dichloroethene	< 0.20	0.20	0.0098	mg/kg wet							

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Blank (B0G2414-BLK1)

Prepared & Analyzed: 07/18/20

cis-1,3-Dichloropropene	< 0.20	0.20	0.016	mg/kg wet							
Dibromochloromethane	< 0.20	0.20	0.011	mg/kg wet							
Dibromomethane	< 0.20	0.20	0.019	mg/kg wet							
Dichlorodifluoromethane	< 0.20	0.20	0.026	mg/kg wet							
Dichlorofluoromethane	< 0.20	0.20	0.016	mg/kg wet							
Ethyl ether	< 0.20	0.20	0.012	mg/kg wet							
Ethylbenzene	< 0.20	0.20	0.0089	mg/kg wet							
Hexachlorobutadiene	< 0.50	0.50	0.031	mg/kg wet							
Isopropylbenzene	< 0.20	0.20	0.014	mg/kg wet							
m,p-Xylene	< 0.40	0.40	0.024	mg/kg wet							
Methyl isobutyl ketone	< 0.20	0.20	0.026	mg/kg wet							
Methyl tert-butyl ether	< 0.20	0.20	0.014	mg/kg wet							
Methylene chloride	< 0.50	0.50	0.024	mg/kg wet							
Naphthalene	< 0.50	0.50	0.030	mg/kg wet							
n-Butylbenzene	< 0.20	0.20	0.011	mg/kg wet							
n-Propylbenzene	< 0.20	0.20	0.018	mg/kg wet							
o-Xylene	< 0.20	0.20	0.0074	mg/kg wet							
p-Isopropyltoluene	< 0.20	0.20	0.0086	mg/kg wet							
sec-Butylbenzene	< 0.20	0.20	0.011	mg/kg wet							
Styrene	< 0.20	0.20	0.0053	mg/kg wet							
tert-Butylbenzene	< 0.20	0.20	0.0061	mg/kg wet							
Tetrachloroethene	< 0.20	0.20	0.010	mg/kg wet							
Tetrahydrofuran	< 1.0	1.0	0.096	mg/kg wet							
Toluene	< 0.20	0.20	0.0085	mg/kg wet							
trans-1,2-Dichloroethene	< 0.20	0.20	0.012	mg/kg wet							
trans-1,3-Dichloropropene	< 0.20	0.20	0.010	mg/kg wet							
Trichloroethene	< 0.20	0.20	0.0034	mg/kg wet							
Trichlorofluoromethane	< 0.20	0.20	0.016	mg/kg wet							
Vinyl chloride	< 0.20	0.20	0.024	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	44.3			ug/L	52.4		84.6	80-120			
Surrogate: Dibromofluoromethane	45.0			ug/L	52.4		85.8	80-120			
Surrogate: Toluene-d8	46.6			ug/L	52.4		88.9	80-120			

LCS (B0G2414-BS1)

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	44.3			ug/L	47.0		94.2	80-120			
1,1,1-Trichloroethane	46.4			ug/L	47.0		98.7	80-120			
1,1,2,2-Tetrachloroethane	49.6			ug/L	47.0		106	75-125			
1,1,2-Trichloroethane	47.0			ug/L	47.0		100	80-120			
1,1,2-Trichlorotrifluoroethane	45.4			ug/L	47.0		96.6	80-120			
1,1-Dichloroethane	47.7			ug/L	47.0		102	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

LCS (B0G2414-BS1)

Prepared & Analyzed: 07/18/20

1,1-Dichloroethene	47.8			ug/L	47.0		102	80-120			
1,1-Dichloropropene	46.6			ug/L	47.0		99.2	80-120			
1,2,3-Trichlorobenzene	40.2			ug/L	47.0		85.4	70-130			
1,2,3-Trichloropropane	48.1			ug/L	47.0		102	75-125			
1,2,4-Trichlorobenzene	41.4			ug/L	47.0		88.1	70-130			
1,2,4-Trimethylbenzene	47.8			ug/L	47.0		102	80-120			
1,2-Dibromo-3-chloropropane	45.8			ug/L	47.0		97.5	72.9-128			
1,2-Dibromoethane (EDB)	43.8			ug/L	47.0		93.1	80-120			
1,2-Dichlorobenzene	43.4			ug/L	47.0		92.2	75-125			
1,2-Dichloroethane	45.5			ug/L	47.0		96.8	77.7-121			
1,2-Dichloropropane	46.2			ug/L	47.0		98.4	80-120			
1,3,5-Trimethylbenzene	47.7			ug/L	47.0		101	80-120			
1,3-Dichlorobenzene	43.5			ug/L	47.0		92.6	75-125			
1,3-Dichloropropane	45.2			ug/L	47.0		96.2	80-120			
1,4-Dichlorobenzene	42.4			ug/L	47.0		90.1	75-125			
2,2-Dichloropropane	50.7			ug/L	47.0		108	66.6-134			
2-Butanone	43.2			ug/L	47.0		91.9	75-125			
2-Chlorotoluene	47.4			ug/L	47.0		101	78.7-120			
4-Chlorotoluene	47.4			ug/L	47.0		101	80-120			
Acetone	40.6			ug/L	47.0		86.4	75-125			
Allyl chloride	46.8			ug/L	47.0		99.5	75-125			
Benzene	46.7			ug/L	47.0		99.4	80-120			
Bromobenzene	45.7			ug/L	47.0		97.3	79.4-120			
Bromochloromethane	46.5			ug/L	47.0		98.9	75.3-124			
Bromodichloromethane	46.2			ug/L	47.0		98.3	80-120			
Bromoform	45.3			ug/L	47.0		96.3	80-120			
Bromomethane	38.7			ug/L	47.0		82.3	70-130			
Carbon tetrachloride	46.9			ug/L	47.0		99.9	80-120			
Chlorobenzene	43.7			ug/L	47.0		93.1	80-120			
Chloroethane	39.7			ug/L	47.0		84.4	75-125			
Chloroform	46.6			ug/L	47.0		99.1	80-120			
Chloromethane	38.5			ug/L	47.0		81.9	75-130			
cis-1,2-Dichloroethene	45.8			ug/L	47.0		97.5	80-120			
cis-1,3-Dichloropropene	47.0			ug/L	47.0		100	80-120			
Dibromochloromethane	44.5			ug/L	47.0		94.7	80-120			
Dibromomethane	45.7			ug/L	47.0		97.3	80-120			
Dichlorodifluoromethane	36.7			ug/L	47.0		78.1	70-130			
Dichlorofluoromethane	41.8			ug/L	47.0		89.0	74-125			
Ethyl ether	45.6			ug/L	47.0		96.9	77.9-123			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

LCS (B0G2414-BS1)

Prepared & Analyzed: 07/18/20

Ethylbenzene	45.8			ug/L	47.0		97.4	80-120			
Hexachlorobutadiene	44.4			ug/L	47.0		94.5	70-130			
Isopropylbenzene	50.3			ug/L	47.0		107	75.9-120			
m,p-Xylene	91.6			ug/L	94.1		97.4	80-120			
Methyl isobutyl ketone	49.3			ug/L	47.0		105	76.6-124			
Methyl tert-butyl ether	48.7			ug/L	47.0		104	80-120			
Methylene chloride	44.1			ug/L	47.0		93.9	75-120			
Naphthalene	44.6			ug/L	47.0		94.9	70-128			
n-Butylbenzene	48.1			ug/L	47.0		102	75-125			
n-Propylbenzene	48.7			ug/L	47.0		104	77.7-120			
o-Xylene	45.9			ug/L	47.0		97.6	80-120			
p-Isopropyltoluene	47.0			ug/L	47.0		100	75-125			
sec-Butylbenzene	48.7			ug/L	47.0		104	75-125			
Styrene	45.6			ug/L	47.0		97.0	80-120			
tert-Butylbenzene	48.7			ug/L	47.0		104	79.8-120			
Tetrachloroethene	43.6			ug/L	47.0		92.8	80-120			
Tetrahydrofuran	48.1			ug/L	47.0		102	75-125			
Toluene	46.8			ug/L	47.0		99.6	80-120			
trans-1,2-Dichloroethene	44.3			ug/L	47.0		94.4	79.8-120			
trans-1,3-Dichloropropene	45.8			ug/L	47.0		97.4	80-120			
Trichloroethene	42.9			ug/L	47.0		91.2	80-120			
Trichlorofluoromethane	41.4			ug/L	47.0		88.1	70.4-130			
Vinyl chloride	40.7			ug/L	47.0		86.6	75-130			
Surrogate: 4-Bromofluorobenzene	46.6			ug/L	52.4		89.0	80-120			
Surrogate: Dibromofluoromethane	44.1			ug/L	52.4		84.2	80-120			
Surrogate: Toluene-d8	46.8			ug/L	52.4		89.4	80-120			

Matrix Spike (B0G2414-MS1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	42.6			ug/L	47.0	0.00	90.7	80-120			
1,1,1-Trichloroethane	44.2			ug/L	47.0	0.00	94.0	80-120			
1,1,2,2-Tetrachloroethane	40.9			ug/L	47.0	0.00	87.1	75-125			
1,1,2-Trichloroethane	44.2			ug/L	47.0	0.00	94.1	80-120			
1,1,2-Trichlorotrifluoroethane	42.5			ug/L	47.0	0.00	90.4	80-120			
1,1-Dichloroethane	44.6			ug/L	47.0	0.00	94.9	80-120			
1,1-Dichloroethene	44.3			ug/L	47.0	0.00	94.3	79.5-120			
1,1-Dichloropropene	42.7			ug/L	47.0	0.00	90.8	80-120			
1,2,3-Trichlorobenzene	35.4			ug/L	47.0	0.00	75.3	70-130			
1,2,3-Trichloropropane	41.3			ug/L	47.0	0.00	88.0	75-125			
1,2,4-Trichlorobenzene	36.9			ug/L	47.0	0.00	78.4	70-130			
1,2,4-Trimethylbenzene	44.2			ug/L	47.0	0.00	94.1	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Matrix Spike (B0G2414-MS1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,2-Dibromo-3-chloropropane	38.5			ug/L	47.0	0.00	82.0	73.6-128			
1,2-Dibromoethane (EDB)	41.9			ug/L	47.0	0.00	89.1	80-120			
1,2-Dichlorobenzene	39.9			ug/L	47.0	0.00	84.9	75-125			
1,2-Dichloroethane	43.7			ug/L	47.0	0.00	92.9	80-120			
1,2-Dichloropropane	45.6			ug/L	47.0	0.00	97.0	80-120			
1,3,5-Trimethylbenzene	44.2			ug/L	47.0	0.00	94.0	80-120			
1,3-Dichlorobenzene	40.1			ug/L	47.0	0.00	85.2	75-125			
1,3-Dichloropropane	43.3			ug/L	47.0	0.00	92.1	80-120			
1,4-Dichlorobenzene	38.4			ug/L	47.0	0.00	81.8	75-125			
2,2-Dichloropropane	44.1			ug/L	47.0	0.00	93.9	60-134			
2-Butanone	33.9			ug/L	47.0	0.00	72.2	75-125			M2
2-Chlorotoluene	43.6			ug/L	47.0	0.00	92.8	78.7-120			
4-Chlorotoluene	42.0			ug/L	47.0	0.00	89.4	79.3-120			
Acetone	29.4			ug/L	47.0	0.00	62.5	75-125			M2
Allyl chloride	42.4			ug/L	47.0	0.00	90.2	75-125			
Benzene	44.7			ug/L	47.0	0.00	95.0	80-120			
Bromobenzene	41.4			ug/L	47.0	0.00	88.1	79.4-120			
Bromochloromethane	43.3			ug/L	47.0	0.00	92.1	75.8-123			
Bromodichloromethane	44.3			ug/L	47.0	0.00	94.2	80-120			
Bromoform	41.8			ug/L	47.0	0.00	89.0	80-120			
Bromomethane	34.8			ug/L	47.0	0.00	74.0	70-130			
Carbon tetrachloride	44.0			ug/L	47.0	0.00	93.7	80-120			
Chlorobenzene	42.4			ug/L	47.0	0.00	90.3	80-120			
Chloroethane	35.9			ug/L	47.0	0.00	76.4	73.8-125			
Chloroform	43.9			ug/L	47.0	0.00	93.4	80-120			
Chloromethane	33.7			ug/L	47.0	0.00	71.7	75-130			M2
cis-1,2-Dichloroethene	43.0			ug/L	47.0	0.00	91.6	80-120			
cis-1,3-Dichloropropene	44.2			ug/L	47.0	0.00	94.1	80-120			
Dibromochloromethane	41.9			ug/L	47.0	0.00	89.1	80-120			
Dibromomethane	44.2			ug/L	47.0	0.00	94.0	80-120			
Dichlorodifluoromethane	35.5			ug/L	47.0	0.00	75.6	70-130			
Dichlorofluoromethane	38.8			ug/L	47.0	0.00	82.6	73.5-127			
Ethyl ether	42.1			ug/L	47.0	0.00	89.7	77.6-124			
Ethylbenzene	44.3			ug/L	47.0	0.00	94.2	80-120			
Hexachlorobutadiene	39.1			ug/L	47.0	0.00	83.1	70-130			
Isopropylbenzene	44.5			ug/L	47.0	0.00	94.7	76.9-120			
m,p-Xylene	86.3			ug/L	94.1	0.00	91.7	80-120			
Methyl isobutyl ketone	44.3			ug/L	47.0	0.00	94.3	75.2-125			
Methyl tert-butyl ether	45.7			ug/L	47.0	0.00	97.2	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Matrix Spike (B0G2414-MS1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

Methylene chloride	40.4			ug/L	47.0	0.00	86.0	76.7-120			
Naphthalene	39.5			ug/L	47.0	0.00	84.0	70-130			
n-Butylbenzene	42.8			ug/L	47.0	0.00	91.0	75-125			
n-Propylbenzene	43.4			ug/L	47.0	0.00	92.3	77.7-120			
o-Xylene	44.3			ug/L	47.0	0.00	94.3	80-120			
p-Isopropyltoluene	43.1			ug/L	47.0	0.00	91.8	75-125			
sec-Butylbenzene	43.7			ug/L	47.0	0.00	93.0	75-125			
Styrene	43.7			ug/L	47.0	0.00	93.0	80-120			
tert-Butylbenzene	44.5			ug/L	47.0	0.00	94.7	79.4-120			
Tetrachloroethene	42.6			ug/L	47.0	0.00	90.7	80-120			
Tetrahydrofuran	40.8			ug/L	47.0	0.00	86.8	75-125			
Toluene	45.0			ug/L	47.0	0.00	95.8	80-120			
trans-1,2-Dichloroethene	41.6			ug/L	47.0	0.00	88.5	80-120			
trans-1,3-Dichloropropene	43.3			ug/L	47.0	0.00	92.1	80-120			
Trichloroethene	42.5			ug/L	47.0	0.00	90.3	80-120			
Trichlorofluoromethane	38.9			ug/L	47.0	0.00	82.8	73.3-127			
Vinyl chloride	34.1			ug/L	47.0	0.00	72.6	75-130			M2
Surrogate: 4-Bromofluorobenzene	47.7			ug/L	52.4		91.0	80-120			
Surrogate: Dibromofluoromethane	45.9			ug/L	52.4		87.7	80-120			
Surrogate: Toluene-d8	48.1			ug/L	52.4		91.9	80-120			

Matrix Spike Dup (B0G2414-MSD1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,1,1,2-Tetrachloroethane	43.2			ug/L	47.0	0.00	91.8	80-120	1.21	20	
1,1,1-Trichloroethane	45.3			ug/L	47.0	0.00	96.3	80-120	2.42	20	
1,1,2,2-Tetrachloroethane	45.6			ug/L	47.0	0.00	97.0	75-125	10.7	20	
1,1,2-Trichloroethane	45.7			ug/L	47.0	0.00	97.2	80-120	3.30	20	
1,1,2-Trichlorotrifluoroethane	43.6			ug/L	47.0	0.00	92.8	80-120	2.68	20	
1,1-Dichloroethane	46.1			ug/L	47.0	0.00	98.0	80-120	3.21	20	
1,1-Dichloroethene	46.6			ug/L	47.0	0.00	99.2	79.5-120	5.09	20	
1,1-Dichloropropene	44.6			ug/L	47.0	0.00	95.0	80-120	4.48	20	
1,2,3-Trichlorobenzene	38.8			ug/L	47.0	0.00	82.6	70-130	9.22	25	
1,2,3-Trichloropropane	44.7			ug/L	47.0	0.00	95.0	75-125	7.75	20	
1,2,4-Trichlorobenzene	39.6			ug/L	47.0	0.00	84.3	70-130	7.18	25	
1,2,4-Trimethylbenzene	46.3			ug/L	47.0	0.00	98.5	80-120	4.53	20	
1,2-Dibromo-3-chloropropane	41.1			ug/L	47.0	0.00	87.5	73.6-128	6.49	20	
1,2-Dibromoethane (EDB)	43.1			ug/L	47.0	0.00	91.8	80-120	3.00	20	
1,2-Dichlorobenzene	41.9			ug/L	47.0	0.00	89.2	75-125	4.83	20	
1,2-Dichloroethane	43.7			ug/L	47.0	0.00	92.9	80-120	0.0449	20	
1,2-Dichloropropane	45.5			ug/L	47.0	0.00	96.8	80-120	0.204	20	
1,3,5-Trimethylbenzene	45.7			ug/L	47.0	0.00	97.3	80-120	3.42	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Matrix Spike Dup (B0G2414-MSD1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

1,3-Dichlorobenzene	41.7			ug/L	47.0	0.00	88.8	75-125	4.08	20	
1,3-Dichloropropane	44.1			ug/L	47.0	0.00	93.8	80-120	1.78	20	
1,4-Dichlorobenzene	39.8			ug/L	47.0	0.00	84.6	75-125	3.41	20	
2,2-Dichloropropane	45.2			ug/L	47.0	0.00	96.2	60-134	2.44	20	
2-Butanone	40.2			ug/L	47.0	0.00	85.4	75-125	16.8	20	
2-Chlorotoluene	44.7			ug/L	47.0	0.00	95.2	78.7-120	2.50	20	
4-Chlorotoluene	44.6			ug/L	47.0	0.00	94.8	79.3-120	5.91	20	
Acetone	37.2			ug/L	47.0	0.00	79.2	75-125	23.5	25	
Allyl chloride	44.2			ug/L	47.0	0.00	94.0	75-125	4.13	20	
Benzene	45.3			ug/L	47.0	0.00	96.5	80-120	1.49	20	
Bromobenzene	43.9			ug/L	47.0	0.00	93.3	79.4-120	5.79	20	
Bromochloromethane	45.6			ug/L	47.0	0.00	97.0	75.8-123	5.13	20	
Bromodichloromethane	44.4			ug/L	47.0	0.00	94.5	80-120	0.301	20	
Bromoform	43.4			ug/L	47.0	0.00	92.3	80-120	3.68	20	
Bromomethane	37.0			ug/L	47.0	0.00	78.6	70-130	6.08	20	
Carbon tetrachloride	46.0			ug/L	47.0	0.00	97.8	80-120	4.32	20	
Chlorobenzene	42.4			ug/L	47.0	0.00	90.3	80-120	0.0130	20	
Chloroethane	39.4			ug/L	47.0	0.00	83.9	73.8-125	9.42	20	
Chloroform	45.8			ug/L	47.0	0.00	97.4	80-120	4.23	20	
Chloromethane	37.4			ug/L	47.0	0.00	79.5	75-130	10.3	20	
cis-1,2-Dichloroethene	45.0			ug/L	47.0	0.00	95.8	80-120	4.54	20	
cis-1,3-Dichloropropene	44.5			ug/L	47.0	0.00	94.6	80-120	0.518	20	
Dibromochloromethane	43.3			ug/L	47.0	0.00	92.2	80-120	3.38	20	
Dibromomethane	43.5			ug/L	47.0	0.00	92.5	80-120	1.64	20	
Dichlorodifluoromethane	35.0			ug/L	47.0	0.00	74.5	70-130	1.38	20	
Dichlorofluoromethane	41.7			ug/L	47.0	0.00	88.8	73.5-127	7.19	20	
Ethyl ether	44.7			ug/L	47.0	0.00	95.0	77.6-124	5.79	20	
Ethylbenzene	44.8			ug/L	47.0	0.00	95.3	80-120	1.22	20	
Hexachlorobutadiene	42.7			ug/L	47.0	0.00	90.9	70-130	8.93	22	
Isopropylbenzene	46.9			ug/L	47.0	0.00	99.7	76.9-120	5.16	20	
m,p-Xylene	87.5			ug/L	94.1	0.00	93.0	80-120	1.40	20	
Methyl isobutyl ketone	46.1			ug/L	47.0	0.00	98.2	75.2-125	4.01	20	
Methyl tert-butyl ether	48.0			ug/L	47.0	0.00	102	80-120	4.92	20	
Methylene chloride	43.0			ug/L	47.0	0.00	91.4	76.7-120	6.07	20	
Naphthalene	43.4			ug/L	47.0	0.00	92.3	70-130	9.42	25	
n-Butylbenzene	44.6			ug/L	47.0	0.00	94.9	75-125	4.12	20	
n-Propylbenzene	45.8			ug/L	47.0	0.00	97.4	77.7-120	5.34	20	
o-Xylene	44.7			ug/L	47.0	0.00	95.2	80-120	0.902	20	
p-Isopropyltoluene	44.6			ug/L	47.0	0.00	94.8	75-125	3.27	20	

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

VOC 8260D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B0G2414 - EPA 5035A Soil (Purge and Trap)

Matrix Spike Dup (B0G2414-MSD1)

Source: 2002758-04

Prepared & Analyzed: 07/18/20

sec-Butylbenzene	45.4			ug/L	47.0	0.00	96.6	75-125	3.78	20	
Styrene	44.8			ug/L	47.0	0.00	95.4	80-120	2.56	20	
tert-Butylbenzene	46.3			ug/L	47.0	0.00	98.5	79.4-120	3.88	20	
Tetrachloroethene	43.6			ug/L	47.0	0.00	92.7	80-120	2.20	20	
Tetrahydrofuran	43.4			ug/L	47.0	0.00	92.3	75-125	6.09	20	
Toluene	45.2			ug/L	47.0	0.00	96.3	80-120	0.491	20	
trans-1,2-Dichloroethene	43.7			ug/L	47.0	0.00	92.9	80-120	4.87	20	
trans-1,3-Dichloropropene	43.9			ug/L	47.0	0.00	93.5	80-120	1.48	20	
Trichloroethene	42.2			ug/L	47.0	0.00	89.7	80-120	0.664	20	
Trichlorofluoromethane	40.1			ug/L	47.0	0.00	85.4	73.3-127	3.12	20	
Vinyl chloride	38.7			ug/L	47.0	0.00	82.3	75-130	12.6	20	
Surrogate: 4-Bromofluorobenzene	48.6			ug/L	52.4		92.7	80-120			
Surrogate: Dibromofluoromethane	45.9			ug/L	52.4		87.6	80-120			
Surrogate: Toluene-d8	48.2			ug/L	52.4		92.0	80-120			

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435	Project: 23271806 Project Number: 23271806 Project Manager: Ms. Andrea Nord	Work Order #: 2002789 Date Reported: 07/28/20
---	---	--

Notes and Definitions

T5	Laboratory not licensed for this parameter.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD value for the MS/MSD was outside of QC acceptance limits. Data was accepted based on LCS and/or LCSD recovery and/or RPD values.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
L1	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
H	Results in the gasoline range contain hydrocarbons less volatile than GRO.
D1	Sample required dilution due to matrix.
D-04	The hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.
<	Less than value listed
dry	Sample results reported on a dry weight basis
NA	Not applicable. The %RPD is not calculated from values less than the reporting limit.
MDL	Method Detection Limit; Equivalent to the method LOD (Limit of Detection)
RL	Reporting Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
MS	Matrix Spike = Laboratory Fortified Matrix (LFM)

BARR Barr Engineering Co. Chain of Custody *200789*

Sample Origination State
 CO MI MN MO ND TX UT WI Other: _____

REPORT TO	INVOICE TO
Company: <i>Barr Eng</i>	Company: <i>Barr Eng</i>
Address:	Address:
Address:	Address:
Name: <i>Andrea Nord</i>	Name:
email: <i>anord@barr.com</i>	email:
Copy to: <i>BarrDM@barr.com</i>	P.O.:
Project Name: <i>Dryn Mnwr</i>	Barr Project No: <i>23271806</i>

Analysis Requested		COC Number: No. 585316
Water	Soil	
		COC <u>1</u> of <u>2</u>
		Matrix Code: GW = Groundwater SW = Surface Water WW = Waste Water DW = Drinking Water S = Soil/Solid SD = Sediment O = Other
		Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ I = Ascorbic Acid J = Zn Acetate K = Other

Location	Sample Depth			Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix Code	Perform MS/MSD Y/N	Total Number Of Containers	Analysis Requested			% Solids	Preservative Code	Field Filtered Y/N		
	Start	Stop	Unit (m./ft. or in.)						Water	Soil	Soil					
1. TE-01-20	0	3.5	ft	07/16/2020	10:00	S	N	3								
2. TE-03-20	0	1.5	ft		12:30	S	N	3								
3. TE-04-20	0	4	ft		13:30	S	N	3								
4. TE-06-20	4	9	ft		16:00	S	N	3								
5. TE-06-20	6	6	ft		16:00	S	N	1								
6. TE-07-20	4	9	ft		17:00	S	N	3								
7. TE-07-20	8	8	ft		17:00	S	N	1								
8. TE-10-20	0	3	ft	07/17/2020	9:50	S	N	3								
9. TE-13-20	3	7	ft		12:40	S	N	3								
10. TE-13-20	3.5	3.5	ft		12:40	S	N	1								

BARR USE ONLY		Relinquished by: <i>Alex Puetz</i>	On Ice? <input checked="" type="radio"/> N	Date: <i>7/17/20</i>	Time: <i>3:52pm</i>	Received by: <i>[Signature]</i>	Date: <i>7/17/20</i>	Time: <i>3:56</i>
Sampled by: <i>Alex Puetz</i>	Barr Proj. Manager: <i>Jenni Brekken</i>	Relinquished by:	On Ice? <input type="checkbox"/> Y <input type="checkbox"/> N	Date:	Time:	Received by:	Date:	Time:
Barr DQ Manager: <i>Andrea Nord</i>	Lab Name: <i>Legend</i>	Samples Shipped VIA: <input type="checkbox"/> Ground Courier <input type="checkbox"/> Air Carrier	Air Bill Number:		Requested Due Date: <input checked="" type="checkbox"/> Standard Turn Around Time <input type="checkbox"/> Rush (mm/dd/yyyy)			
Lab Location: <i>St. Paul, MN</i>	Lab WO: <i>Temperature on Receipt (°C): 11°C</i>	Custody Seal Intact? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> None						

Distribution - White-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Scan and email: a copy to BarrDM@barr.com for tracking and filing procedures.

H:\RLO\STDFORMS\Chain of Custody Form 2015 RLG Rev. 01/30/2020

Data File: \\lts-target\targetdata\chem\FID5.i\200721.b\040.d
Date : 22-JUL-2020 09:08
Client ID:
Sample Info: 2002789-01 sil rr

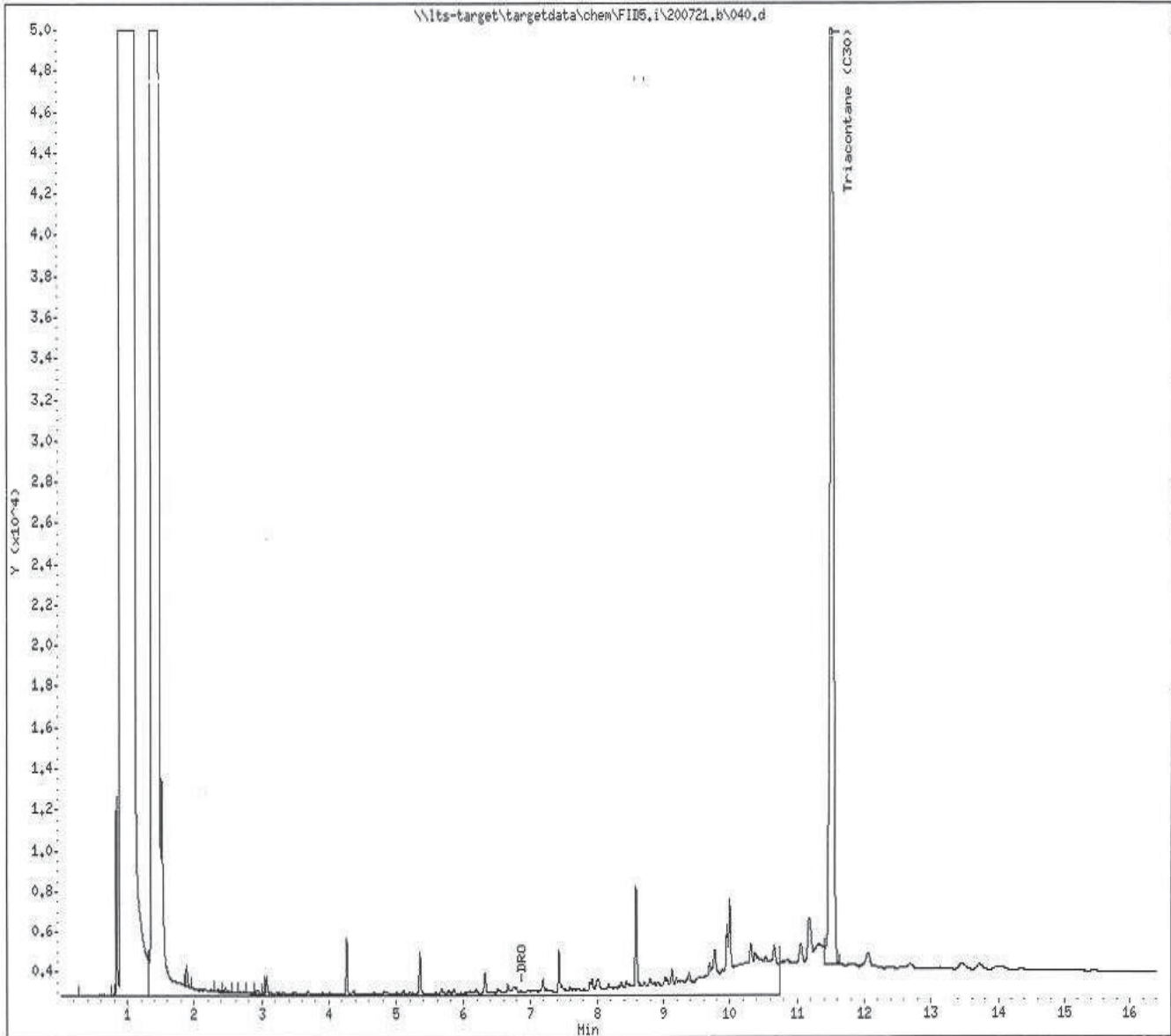
Page 2

Instrument: FID5.i

Operator: yp

Column diameter: 0.53

Column phase:



Data File: \\lts-target\targetdata\chem\FID5,1\200721.b\028.d
Date : 22-JUL-2020 04:43
Client ID:
Sample Info: 2002789-02 sil

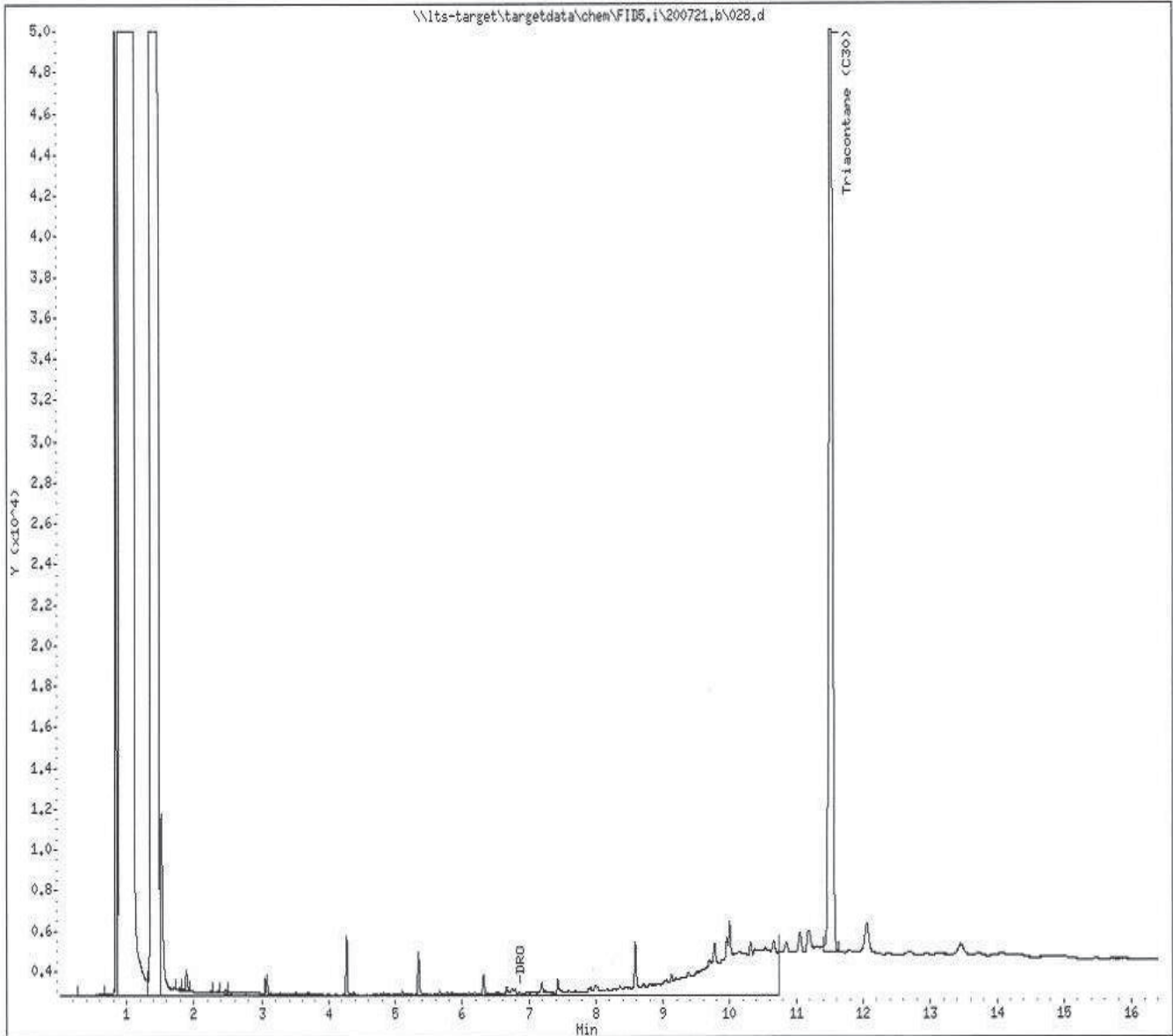
Page 2

Instrument: FID5,1

Operator: yp

Column diameter: 0.53

Column phase:



Data File: \\lts-target\targetdata\chem\FID5.i\200721.b\066.d

Page 2

Date : 22-JUL-2020 18:21

Client ID:

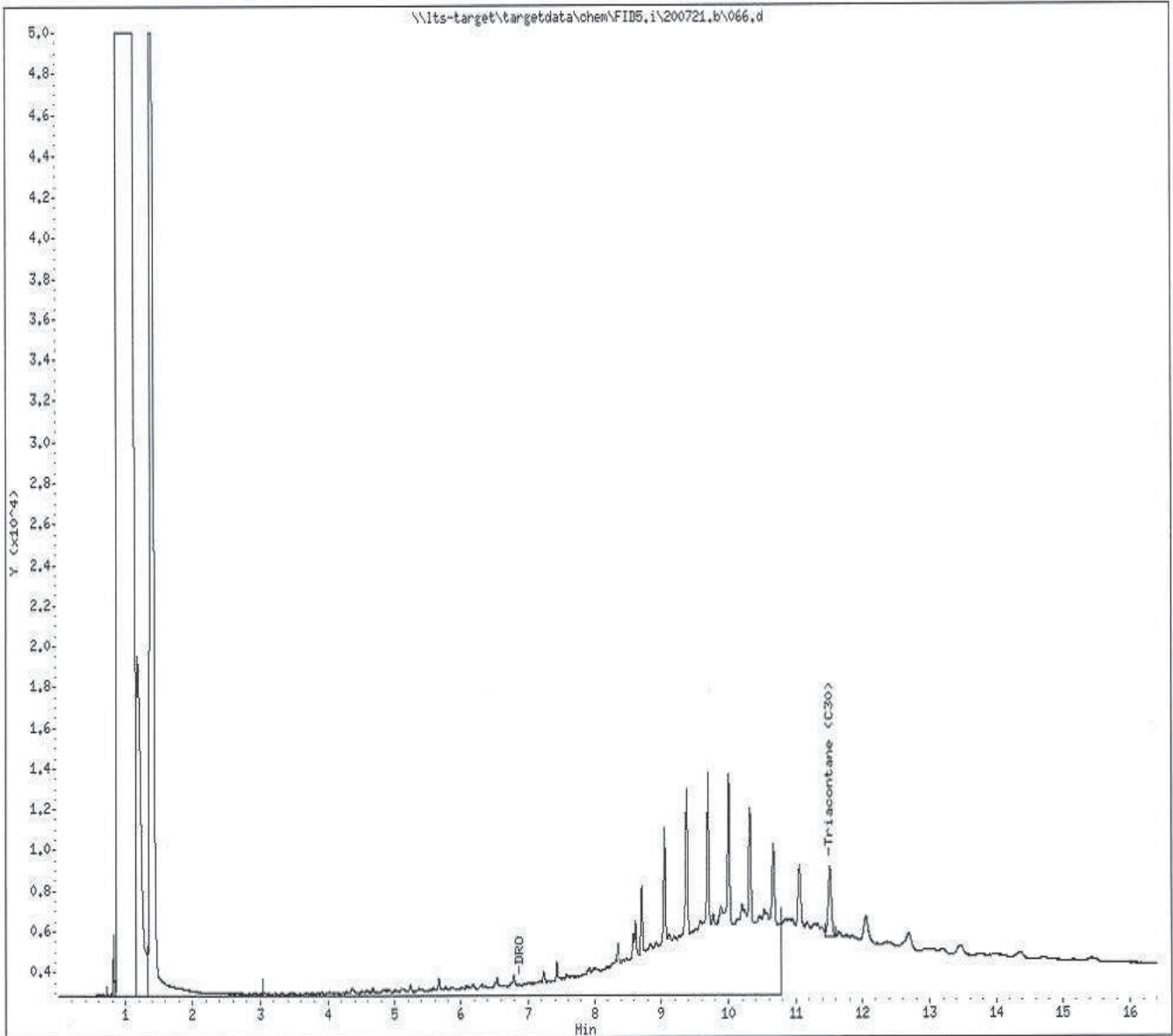
Instrument: FID5.i

Sample Info: 2002789-04 sil m x40

Operator: yp

Column phase:

Column diameter: 0.53



Data File: \\its-target\targetdata\chem\FID5,i\200721,b\073,d

Page 2

Date : 22-JUL-2020 20:50

Client ID:

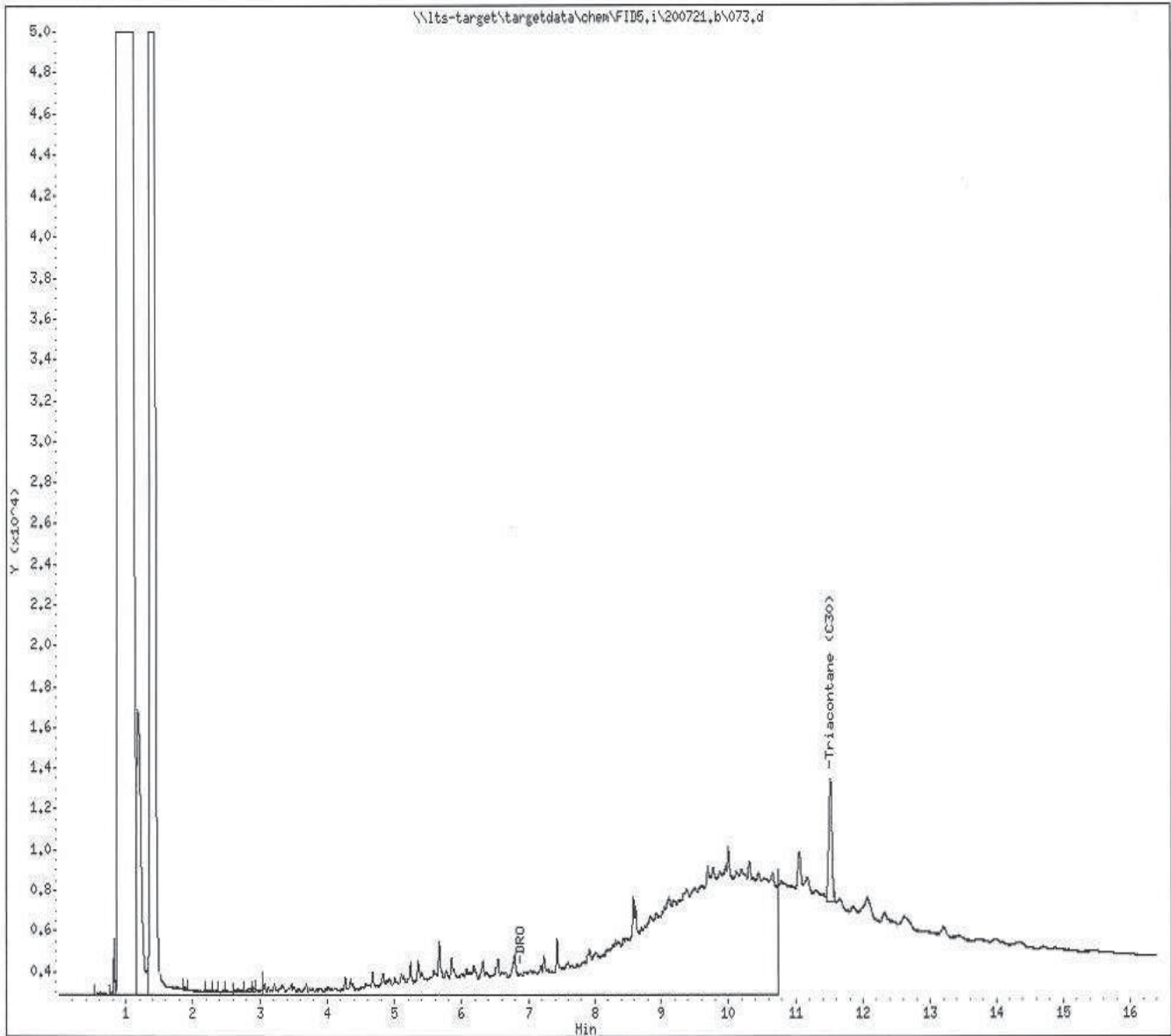
Instrument: FID5.i

Sample Info: 2002789-06 sil x10

Operator: yp

Column phase:

Column diameter: 0.53



Data File: \\its-target\targetdata\chem\FID5,i\200721,b\069,d

Page 2

Date : 22-JUL-2020 19:25

Client ID:

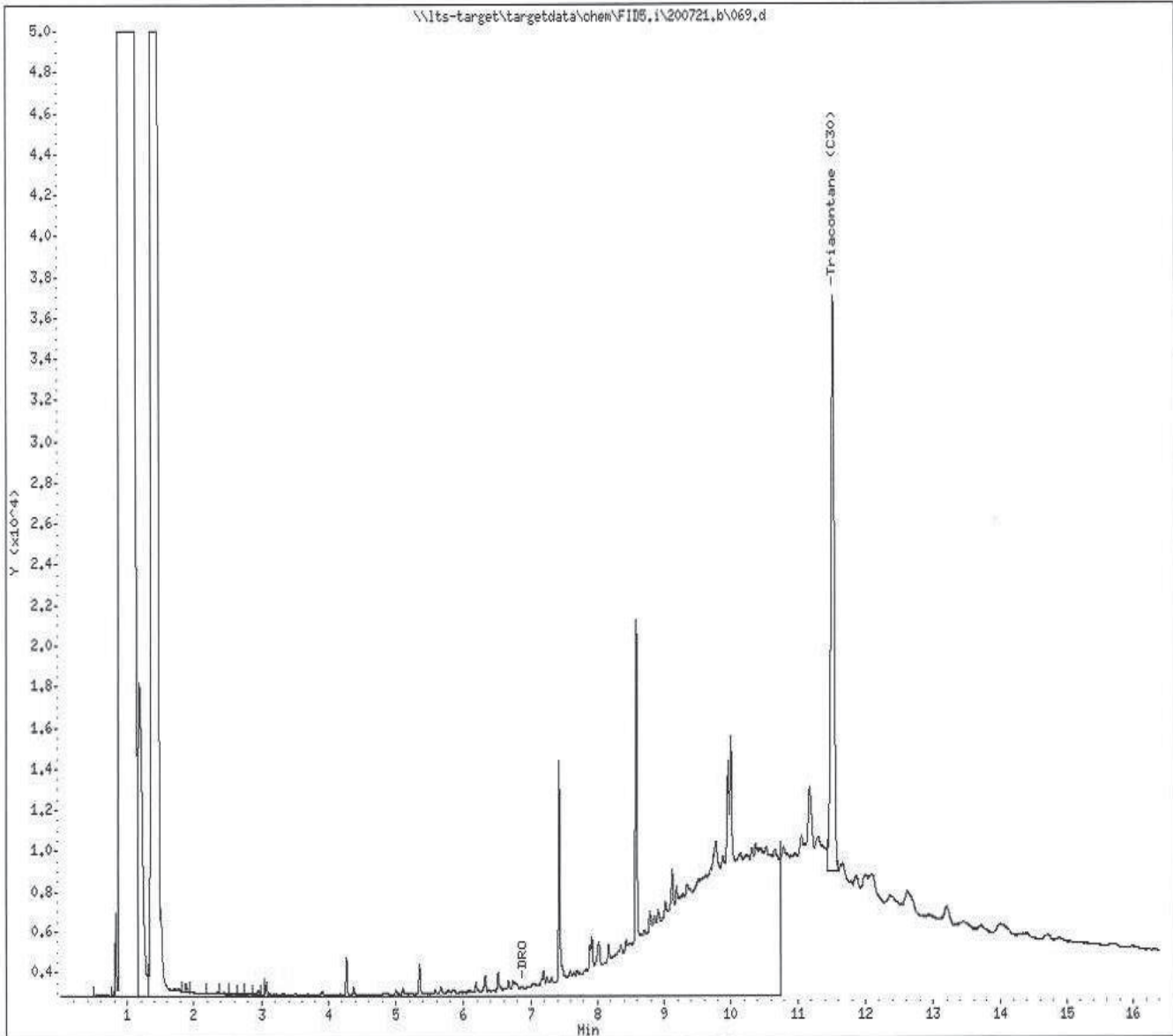
Instrument: FID5,i

Sample Info: 2002789-08 sil rr x2

Operator: yg

Column phase:

Column diameter: 0.53



Data File: \\Its-target\targetdata\chem\FID5.i\200721.b\077.d

Page 2

Date : 22-JUL-2020 22:16

Client ID:

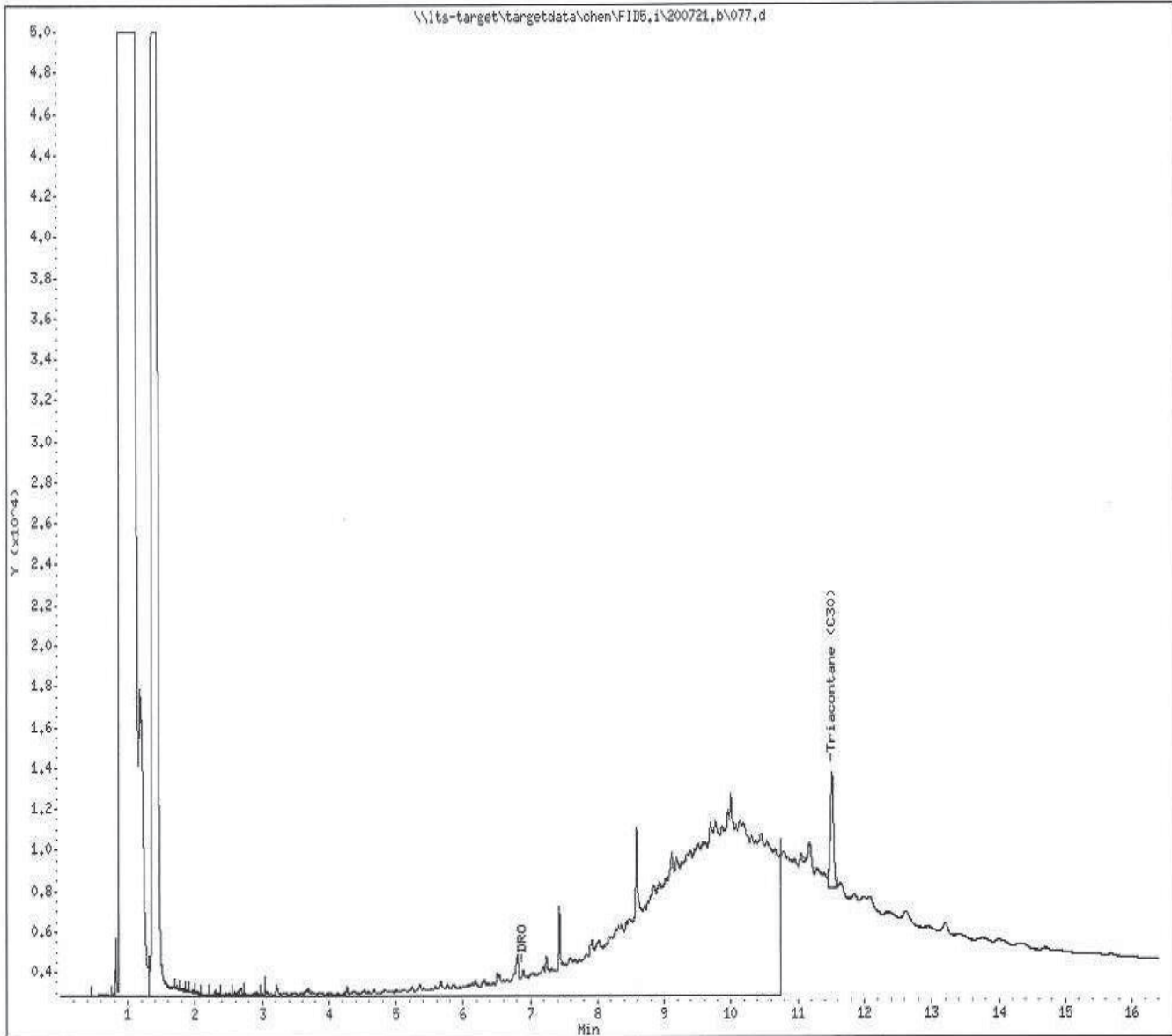
Instrument: FID5.i

Sample Info: 2002789-09 sil x10

Operator: ye

Column phase:

Column diameter: 0.53



Data File: \\lts-target\targetdata\chem\FID5,i\200721,b\063,d

Page 2

Date : 22-JUL-2020 17:18

Client ID:

Instrument: FID5.i

Sample Info: 2002789-11 sil rr

Operator: yp

Column phase:

Column diameter: 0.53

