Release Investigation Activities
Holiday Station Store No. 611
1530 Huffman Road
Anchorage, Alaska
ADEC File 2100.26.623

October 2020

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103880-011

TABLE OF CONTENTS

Page

TABLES

FIGURES

APPENDICES

ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AK	Alaska Method
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
BTOC	Below Top of Casing
Discovery	Discovery Drilling, Inc.
DQO	Data Quality Objective
DRO	Diesel Range Organics
EPA	Environmental Protection Agency
GRO	Gasoline Range Organics
HSS	Holiday Station Store
IDW	Investigation-Derived Waste
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
LDRC	Laboratory Data Review Checklist
LOQ	Limit of Quantification
mg/kg	Milligram per Kilogram
µg/L	Microgram per Liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
mV	Millivolts
NRC	NRC Alaska, LLC
NTU	Nephelometric Turbidity Units
PAH	Polynuclear Aromatic Hydrocarbons
PID	Photoionization Detector
ppm	Parts Per Million
Prism	Prism Design & Construction, LLC
PVC	Polyvinyl Chloride
RPD	Relative Percent Difference
SGS	SGS North America Inc.
SIM	Selective Ion Method
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

RELEASE INVESTIGATION ACTIVITIES
HOLIDAY STATION STORE NO. 611
1530 HUFFMAN ROAD
ANCHORAGE, ALASKA
ADEC FILE NO. 2100.26.623

1.0 INTRODUCTION

This report presents the results of Shannon & Wilson's release investigation activities conducted at Holiday Station Store (HSS) No. 611 located at 1530 Huffman Road in Anchorage, Alaska. A vicinity map and a site plan are included as Figures 1 and 2, respectively.

2.0 BACKGROUND

Prism Design & Construction, LLC (Prism) conducted fuel dispenser upgrades at HSS No. 611 in November 2018. Prism identified potential petroleum-impacted soil within two diesel dispenser excavations (Excavations 1 and 2) and one gasoline dispenser excavation (Excavation 3) during the upgrade activities. On November 27, 2018, approximately 15 cubic yards of potentially impacted soil were stockpiled on site by Prism. At the request of Holiday, Shannon & Wilson characterized the three potentially impacted dispenser excavations on November 28, 2018. Based on a discussion with the Alaska Department of Environmental Conservation (ADEC) on November 28, 2018, the stockpile was also characterized for disposal purposes.

Soil samples collected from the limits of Excavations 1 and 2 contained concentrations (maximum of 2,960 milligram per kilogram [mg/kg]) of diesel range organics (DRO) exceeding the ADEC Method Two cleanup level of 250 mg/kg. Soil samples collected from Excavation 3 did not contain target analytes greater than the ADEC cleanup levels. The 49.76-ton soil stockpile was transported to Alaska Soil Recycling for thermal treatment. Further details regarding the site activities can be found in our March 20, 2019 *Soil Sampling, Holiday Station Store No. 611, 1530 Huffman Road, Anchorage, Alaska; ADEC Spill No. 18239933102* report.

During a June 17, 2019 meeting between representatives of Holiday, the ADEC, and Shannon &Wilson, the ADEC requested further evaluation of the reported releases. The 2020 release investigation activities were performed in material accordance with our December 26, 2019 *Work Plan to Release Investigation Activities, Holiday Station Store No. 611, 1530 Huffman Road, Anchorage, Alaska; ADEC Spill No. 18239933102*, which was approved by Mr. Grant Lidren of the ADEC in an email dated April 16, 2020.

3.0 FIELD ACTIVITIES

Field activities consisted of advancing three soil borings, installing three groundwater monitoring wells, collecting soil and groundwater samples, conducting a level-loop survey, and management of investigation-derived waste (IDW). Discovery Drilling, Inc. (Discovery) of Anchorage, Alaska provided the equipment and personnel to advance the borings and install the groundwater monitoring wells. SGS North America Inc. (SGS) provided analysis of soil and groundwater samples. NRC Alaska LLC (NRC) disposed/treated the IDW. Site photographs and copies of field notes are included in Appendices A and B, respectively. Boring and well construction logs are provided in Appendix C. It should be noted that the field notes presented in Appendix B are provided for informational purposes only. Tables 1 through 4, and the boring logs and well completion logs presented in Appendix C represent our interpretation of the field data, and take precedent over the field notes.

3.1 Soil Borings and Sampling

Three soil borings, designated Borings B1 through B3, were advanced by Discovery on July 30, 2020. Discovery used a GeoProbe® 7822DT drill rig equipped with 4.25-inch inside diameter hollow-stem augers to advance the borings. Borings B1, B2, and B3 were advanced to evaluate whether contaminated soil is present beyond the limits of the fueling canopy. Borings B1, B2, and B3 were advanced north, west, and south of the fueling canopy, respectively.

The borings were advanced to approximately 19 feet below ground surface (bgs) to facilitate the collection of soil samples and the installation of groundwater monitoring wells. Due to potential unmarked utilities and fuel lines, the first 5 feet of each boring were advanced with an air knife. A hand auger was used to collect grab soil samples from about 2 to 2.5 feet bgs and 4 to 4.5 feet bgs in each boring. Starting at approximately 5 feet bgs, soil samples were recovered on a continuous basis using 3-inch outside diameter split spoon samplers driven by a 340-pound hammer.

Immediately following retrieval and opening of the split-spoon samplers, analytical samples and field screening samples were collected. The analytical sample jars for volatile analyses were collected first, followed by the non-volatile analytical sample jars, and finally the field screening sample. The soil samples were “screened” for volatile organic vapors using a Thermo Instruments OVM 580B photoionization detector (PID) and an ADEC-approved headspace screening technique. The PID was calibrated before screening activities with 100 parts per million (ppm) isobutylene standard gas. The field screening samples were collected in re-sealable plastic bags by filling them with freshly exposed soil to one-half of their volumes, sealing the top, warmed to at least 40 degrees Fahrenheit, and screened within 10 minutes to one hour of collection. Screening was accomplished by inserting the PID sampling probe into the air

space above the soil in the bag. The field screening results are presented in Table 1 and Appendix C.

Two analytical soil samples from each boring were submitted for laboratory analysis. The samples were collected from the interval just above the soil/water interface and from the sample interval with the highest PID measurement, collected from above the soil/water interface. Soil samples for laboratory analysis were collected in laboratory-supplied jars in decreasing order of volatility. For each volatile sample, at least 25 grams of soil, but no more than what can be completely submerged with 25-milliliters of methanol, was placed into a pre-weighted, 4-ounce jar with a septa lid. A 25-milliliter aliquot of methanol containing laboratory-added surrogates was added to the sample jar to submerge the soil sample. For each non-volatile sample, the laboratory-supplied jar was completely filled with soil taking care to avoid pieces of gravel and debris. Sample jars were filled using decontaminated stainless steel spoons, placed in coolers with ice packs, and transferred to the laboratory using chain-of-custody procedures.

3.2 Monitoring Well Installation

Borings B1 through B3 were completed as Monitoring Wells MW1 through MW3, respectively. The monitoring wells were constructed of 2-inch nominal inside diameter schedule 40 polyvinyl chloride (PVC) pipe with threaded connections. The lower portion of each well consists of a 10-foot section of 0.010 prepack well screen. A continuous 20-40 silica sand pack was used to backfill around the well screens to about 2 feet above the screened section. Hydrated bentonite chips were used to backfill above the filter pack to approximately 1-foot bgs. Pea gravel was placed above the bentonite to about 0.5-foot bgs. The monitoring wells were completed with flushmount protective casings embedded in an asphalt patch to match the surrounding grade. Monitoring well construction details are included in Appendix C.

3.3 Monitoring Well Development

Monitoring Wells MW1 through MW3 were developed on August 3, 2020. Prior to initiating the well development activities, water depth relative to the top of the well casings was measured with an electronic water level indicator. The wells were developed using a surge block and a submersible pump with dedicated disposable tubing. Three to five-minute periods of surging were alternated with periods of pumping. Water quality parameters, including pH, temperature, oxidation-reduction potential (ORP), turbidity, and conductivity were measured to evaluate the effectiveness of the development process.

Development of Monitoring Well MW2 was considered complete once stabilization criteria were met over three successive readings: pH was within 0.1 unit, temperature was within 3 percent (minimum 0.2 degree Celsius), conductivity was within three percent, and turbidity was within

10 percent. During development, approximately 33.7 gallons of water were removed from Well MW2.

Monitoring Wells MW1 and MW3 purged dry multiple times during development. These wells were allowed to recover to 80 percent of their pre-purge water column, surged for approximately 5 minutes, and then purged dry again. Development was considered complete after three hours of effort was expended at each of these wells. During development, approximately 9.2 and 3.95 gallons of water were removed from Wells MW1 and MW3, respectively. Groundwater data, including final water quality parameter measurements during development, are summarized in Table 2.

3.4 Monitoring Well Sampling

Monitoring Wells MW, MW2, and MW3 were sampled on August 3, 2020 following development. Analytical samples were collected by transferring water directly from the disposable tubing into the laboratory supplied containers. The sample jars were filled in decreasing order of volatility. Monitoring well sampling data are presented in Table 3.

3.5 Monitoring Well Survey

The vertical elevations of the groundwater monitoring wells were measured using a level loop vertical survey. Survey readings of the monitoring wells were taken relative to an arbitrary onsite benchmark to assess groundwater flow direction. The elevation survey of the monitoring wells was closed within an accuracy of 0.01 foot. Swing tie measurements were measured from the borings and monitoring wells to fixed locations to verify the horizontal locations. Based on August 3, 2020 depth-to-water measurements, the approximately groundwater flow direction is to the north.

3.6 Investigation-Derived Waste Management

IDW consisted of drill cuttings and development generated during drilling and groundwater sampling activities, respectively. Soil cuttings were containerized in three 55-gallon drums and development water was containerized in two 55-gallon drums. Shannon & Wilson coordinated with NRC for offsite disposal/treatment of the IDW. The signed ADEC *Transport, Treatment & Disposal Approval Form for Contaminated Media* and a copy of the waste manifest is provided in Appendix D.

4.0 LABORATORY ANALYSES

The soil and groundwater samples were submitted to SGS for analytical testing, using chain-of-custody procedures. Each soil sample was analyzed for gasoline range organics (GRO) by Alaska Method (AK) 101, DRO by AK 102, and benzene, toluene, ethylbenzene, and xylenes

(BTEX) by Environmental Protection Agency (EPA) Method 8021B. In addition, one sample from each boring was analyzed for volatile organic compounds (VOCs) by EPA Method 8260D, in lieu of BTEX, and polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270D SIM. Each groundwater sample was analyzed for GRO by AK 101, DRO by AK 102, VOCs by EPA Method 8260D, and PAHs by EPA Method 8270D SIM. For quality control purposes, one methanol soil trip blank and one water trip blank were submitted to the laboratory and analyzed for GRO and VOCs. One field duplicate soil sample and one duplicate groundwater sample were also collected. The laboratory reports and completed ADEC Laboratory Data Review Checklists (LDRCs) are provided in Appendix E. The analytical soil and groundwater sample results are summarized in Table 3 and Table 4, respectively.

5.0 SUBSURFACE CONDITIONS

The subsurface soil at the site generally consists of poorly graded sand with varying amounts of gravel and silt. During drilling, groundwater was encountered at approximately 15 feet bgs in each boring. The measured static depth to water ranged from 14.05 feet below top of casing (BTOC) in Well MW2 to 14.43 feet BTOC in Well MW3. Based on the static groundwater measurements and level-loop survey, the approximate groundwater flow direction is to the north.

6.0 DISCUSSION OF ANALYTICAL RESULTS

The analytical soil and groundwater results were compared to ADEC cleanup levels presented in the September 2018, 18 Alaska Administrative Code (AAC) 75 regulations. The applicable soil criteria consist of the most stringent ADEC Method Two cleanup levels listed in Tables B1 and B2 of 18 AAC 75.341, for the “under 40-inch (precipitation) zone”. Groundwater cleanup levels are established in Table C of 18 AAC 75.345. The applicable soil and groundwater cleanup levels are listed in Tables 3 and 4, respectively.

6.1 Soil Samples

GRO, DRO, toluene, xylenes, tetrachloroethene, benzo(a)pyrene, benzo(g,h,i)perylene, and/or chrysene were detected in at least one soil sample at concentrations less than the most stringent ADEC Method Two cleanup levels. The remaining tested analytes were not detected in the soil samples.

6.2 Groundwater Samples

GRO, DRO, dichlorodifluoromethane, trichlorofluoromethane, and/or tetrachloroethene were detected in at least one groundwater sample at concentrations less than the ADEC Table C cleanup levels. The remaining tested analytes were not detected in the groundwater samples.

6.3 Quality Control Samples

The project laboratory follows on-going quality assurance/quality control procedures to evaluate conformance to applicable ADEC data quality objectives (DQOs). Internal laboratory controls to assess data quality for this project include surrogates, method blanks, matrix spike/matrix spike duplicates (MS/MSD), and laboratory control sample/laboratory control sample duplicates (LCS/LCSD) to assess precision, accuracy, and matrix bias. If a DQO was not met, the project laboratory provides a brief narrative concerning the problem in the case narrative of their laboratory reports (see Appendix E).

Field quality control samples included trip blanks and a field duplicate soil and groundwater sample sets. Laboratory-prepared trip blank samples (one soil and one water) accompanied the project sample jars and bottles from the laboratory to the site during sampling activities and back again to SGS. Both the soil and water trip blanks did not contain detectable concentrations of VOCs.

One duplicate soil (B3S7/B3S17) and one groundwater sample set (MW2/MW12) were collected to assess precision of the sampling and analysis processes using the calculated relative percent difference (RPD). All of the RPDs are within the ADEC recommended DQO of 50 percent for soil or 30 percent for groundwater.

Estimated concentrations of methylene chloride and GRO were detected in at least one method blank associated with the soil samples. Estimated concentrations of GRO were detected in Samples B3S7 and B3S17 at concentrations less than the limit of quantitation (LOQ). Therefore, the sample results are reported as non-detect at the LOQ and flagged “B” on Table 3.

Shannon & Wilson conducted a limited data assessment to review the laboratory’s compliance with precision, accuracy, sensitivity, and completeness to the data quality objectives. Shannon & Wilson reviewed the SGS data deliverables and completed the ADEC’s Laboratory Data Review Checklist for each data package, which is included in Appendix E. No non-conformances that would adversely affect the quality or usability of the data were noted, with the exceptions discussed above.

7.0 CONCLUSIONS

Project activities consisted of advancing three soil borings, installing three groundwater monitoring wells, and collecting soil and groundwater samples. Based on the 2018 dispenser sampling activities, petroleum-impacted soil is present in the vicinity of three of the on-site dispensers. Contaminant concentrations exceeding the most stringent ADEC cleanup levels were not detected in the soil and groundwater sample collected during the release investigation activities. Therefore, the dispenser releases have not impacted soil outside the limits of the

dispenser canopy or impacted the site's groundwater. As a result, we recommend decommissioning Monitoring Wells MW1, MW2, and MW3 and issuing a cleanup complete with institutional controls determination for the site.

8.0 CLOSURE/LIMITATIONS

This report is prepared for the exclusive use of our client and their representatives in the study of this site. The findings presented within this report are based on the limited research, sampling, and analyses that were conducted. They should not be construed as definite conclusions regarding the site's soil or groundwater quality. As a result, the sampling, analyses, and data interpretations can provide you with only our professional judgment as to the environmental characteristics of this site, and in no way guarantee that an agency or its staff will reach the same conclusions as Shannon & Wilson, Inc. The data presented in this report should be considered representative of the time of our release investigation activities. Changes in site conditions can occur over time, due to natural forces or human activity. In addition, changes in government codes, regulations, or laws may occur. Because of such changes beyond our control, our observations and interpretations may need to be revised.

You are advised that various state and federal agencies (ADEC, EPA, etc.) may require the reporting of this information. Shannon & Wilson does not assume the responsibility for reporting these findings and therefore has not, and will not, disclose the results of this study unless specifically requested and authorized by Shoreside Petroleum Inc., or as required by law.

Shannon & Wilson has prepared the information in Appendix F, "Important Information About Your Geotechnical/Environmental Report," to assist you and others in understanding the use and limitations of our report.

We appreciate this opportunity to be of service and your continued confidence in our firm. If you have questions or comments concerning this submittal, please contact the undersigned at (907) 561-2120.

SHANNON & WILSON, INC.

Alec Rizzo
Environmental Staff

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TABLE 1
SAMPLE LOCATIONS

Sample Number	Date	Sample Location (See Figure 2 and Appendix C)	Depth (feet bgs or BTOC)	Headspace (ppm) ^
Soil Samples				
Boring B1				
B1S1	7/30/2020	Boring B1, Sample S1	2-2.5	0.6
B1S2	7/30/2020	Boring B1, Sample S2	4.5-5	0.3
B1S3A	7/30/2020	Boring B1, Sample S3A (No Recovery)	5-7	-
B1S3	7/30/2020	Boring B1, Sample S3	7-9	0.3
* B1S4	7/30/2020	Boring B1, Sample S4	9-11	0.5
B1S5	7/30/2020	Boring B1, Sample S5	11-13	0.2
* B1S6	7/30/2020	Boring B1, Sample S6	13-15	0.3
B1S7	7/30/2020	Boring B1, Sample S7	15-17	0.1
B1S8	7/30/2020	Boring B1, Sample S8	17-19	0.7
Boring B2				
B2S1	7/30/2020	Boring B2, Sample S1	2-2.5	0.6
B2S2	7/30/2020	Boring B2, Sample S2	4.5-5	0.5
* B2S3	7/30/2020	Boring B2, Sample S3	5-7	1.4
B2S4	7/30/2020	Boring B2, Sample S4	7-9	1.3
B2S5	7/30/2020	Boring B2, Sample S5	9-11	0.4
B2S6	7/30/2020	Boring B2, Sample S6	11-13	0.3
* B2S7	7/30/2020	Boring B2, Sample S7	13-15	0.3
B2S8	7/30/2020	Boring B2, Sample S8	15-17	0.5
B2S9	7/30/2020	Boring B2, Sample S9	17-19	0.2
Boring B3				
B3S1	7/30/2020	Boring B3, Sample S1	2-2.5	0.5
B3S2	7/30/2020	Boring B3, Sample S2	4.5-5	0.6
B3S3	7/30/2020	Boring B3, Sample S3	5-7	0.8
B3S4	7/30/2020	Boring B3, Sample S4	7-9	0.8
* B3S5	7/30/2020	Boring B3, Sample S5	9-11	1.0
B3S6	7/30/2020	Boring B3, Sample S6	11-13	0.2
* B3S7	7/30/2020	Boring B3, Sample S7	13-15	0.6
* B3S17	7/30/2020	Duplicate of Sample B3S7	13-15	0.6
B3S8	7/30/2020	Boring B3, Sample S8	15-17	0.3
B3S9	7/30/2020	Boring B3, Sample S9	17-19	0.4
Water Samples				
* MW1	8/3/2020	Monitoring Well MW1	14.06	-
* MW2	8/3/2020	Monitoring Well MW2	14.05	-
* MW12	8/3/2020	Duplicate of Monitoring Well MW2	14.05	-
* MW3	8/3/2020	Monitoring Well MW3	14.43	-
Quality Control Samples				
* STB	7/30/2020	Soil Trip Blank	-	-
* WTB	8/3/2020	Water Trip Blank	-	-

Notes:

* = Sample analyzed by the project laboratory (See Tables 3 and 4)

^ = Field screening instrument was a Thermo Environmental Instruments 580B photoionization detector (PID)

\- = Measurement not applicable

bgs = below ground surface

BTOC = Below top of casing

ppm = parts per million

TABLE 2
MONITORING WELL DEVELOPMENT & SAMPLING LOG

	Monitoring Well		
	MW1	**MW2**	**MW3**
Development Data			
Development Date	8/3/2020	8/3/2020	8/3/2020
Measured Depth to Water (ft below TOC)	14.06	14.05	14.43
Total Depth of Well (ft below TOC)	19.32	19.20	19.05
Water Column in Well (ft)	5.26	5.15	4.62
Gallons per Foot	0.16	0.16	0.16
Water Column Volume (gallons)	0.84	0.82	0.74
Total Volume Pumped/Bailed (gallons)	9.2	33.7	3.95
Development Method	Surge Block and Submersible Pump	Surge Block and Submersible Pump	Surge Block and Submersible Pump
Water Level Measurement Data			
Date Water Level Measured	8/3/2020	8/3/2020	8/3/2020
Time Water Level Measured	9:05	9:32	14:27
Surveyed TOC Elevation (ft)	98.26	98.32	99.13
Measured Depth to Water (ft below TOC)^	14.06	14.05	14.43
Water Elevation (ft)	84.20	84.27	84.70
Sampling Data			
Date Sampled	8/3/2020	8/3/2020	8/3/2020
Time Sampled	13:30	13:30	17:25
Sampling Method	Submersible Pump	Submersible Pump	Submersible Pump
Diameter of Well Casing	2-inch	2-inch	2-inch
Water Quality Data ^			
Temperature (°C)	8.83	10.97	11.8
pH (Standard Units)	5.10	6.09	6.44
Specific Conductivity (µS/cm)	5,898	10.5	2,843
Oxidation Reduction Potential (m/V)	210	-26	-94
Turbidity (NTU)	374	93	787
Remarks	Purged dry during development	Duplicate Sample MW12	Purged dry during development

Notes:

Water quality parameters were measured with Hanna and Horiba Water Quality Instruments

^ = Water quality data at time of sampling
TOC = Top of casing
ft = Feet
m/V = Millivolts
NTU = Nephelometric Turbidity Unit
°C = Degrees Celsius
µS/cm = Microsiemens per Centimeter

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS

Parameter Tested	Method*	Cleanup Level (mg/kg)**	Sample ID Number^ and Soil Sample Depth in Feet bgs or Sample Date (See Table 1, Figure 1, and Appendix C)							
			Soil Borings							Quality Control
			Boring B1		Boring B2		Boring B3			Trip Blank
			B1S4	B1S6	B2S3	B2S7	B3S5	B3S7	B3S17~	STB
			9-11	13-15	5-7	13-15	9-11	13-15	13-15	7/31/20
PID Headspace Reading - ppm	580B PID	-	0.5	0.3	1.4	0.3	1.0	0.6	0.6	-
Gasoline Range Organics (GRO) - mg/kg	AK 101	300	<1.55	<1.43	**0.944 J**	<0.910	<1.10	<3.55 B	<2.98 B	<1.25
Diesel Range Organics (DRO) - mg/kg	AK 102	250	**12.4 J**	**7.59 J**	**7.86 J**	<10.5	**18.4 J**	**7.71 J**	**10.4 J**	-
Volatile Organic Compounds (VOCs)										
Benzene - mg/kg	EPA 8021B/8260D	0.022	<0.00780	<0.00715	<0.00690	<0.00456	<0.00550	<0.00885	<0.00745	<0.00625
Toluene - mg/kg	EPA 8021B/8260D	6.7	<0.0156	<0.0143	**0.0278**	<0.00910	**0.0202 J**	<0.0178	**0.0108 J**	<0.0126
Ethylbenzene - mg/kg	EPA 8021B/8260D	0.13	<0.0156	<0.0143	<0.0138	<0.00910	<0.0110	<0.0178	<0.0149	<0.0126
Xylenes (total) - mg/kg	EPA 8021B/8260D	1.5	<0.0467	<0.0429	**0.0414**	<0.0274	**0.0352 J**	<0.0530	<0.0448	<0.0376
Tetrachloroethene - mg/kg	EPA 8260D	0.19	<0.00780	-	<0.00690	-	-	**0.0534**	**0.0488**	<0.00625
Other VOCs - mg/kg	EPA 8260D	Various	ND	-	ND	-	-	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PAHs)										
Benzo(a)pyrene - mg/kg	EPA 8270D-SIM	1.5	**0.00932 J**	-	<0.0128	-	-	<0.0136	<0.0139	-
Benzo(g,h,i)perylene - mg/kg	EPA 8270D-SIM	2,300	**0.0118 J**	-	<0.0128	-	-	<0.0136	<0.0139	-
Chrysene - mg/kg	EPA 8270D-SIM	600	**0.00743 J**	-	<0.0128	-	-	<0.0136	<0.0139	-
Other PAHs - mg/kg	EPA 8270D-SIM	Various	ND	-	ND	-	-	ND	ND	-

Notes:

^ = Sample ID number preceded by "103880-" on the chain of custody form

\- = Not applicable or sample not tested for this analyte

* = See Appendix E for compounds tested, methods, and laboratory reporting limits

** = Soil cleanup level is the most stringent ADEC Method Two standard listed in Table B1 or B2, 18 AAC 75 (October 27, 2018), for the "under 40 inches (precipitation) zone"

<1.55 = Analyte not detected; laboratory limit of detection of 1.55 mg/kg

12.4 = Analyte detected

B = Analyte concentration potentially affected by a method or trip blank detection. See Appendix E for details.

J = Estimated concentration less than the limit of quantitation. See the SGS laboratory report for more details.

ppm = part per million

ND = Not detected

mg/kg = Milligram per kilogram

~ = Duplicate of Sample B3S7

TABLE 4
SUMMARY OF WATER ANALYTICAL RESULTS

Parameter Tested	Method*	Cleanup Level (µg/L)**	Sample ID Number^, Sample Date, and Water Depth in Feet BTOC (See Tables 1 and 2, Figure 1, and Appendix C)				
			Monitoring Wells				Trip Blank
			MW1 11.13	MW2 12.38	MW12~ 12.38	MW3 14.45	WTB 8/3/2020
Gasoline Range Organics (GRO) - µg/L	AK 101	2,200	<50.0	**31.5 J**	<50.0	<50.0	<50.0
Diesel Range Organics (DRO) - µg/L	AK 102	1,500	**267 J**	**342 J**	**275 J**	**388 J**	-
Volatile Organic Compounds (VOCs)							
Benzene - µg/L	EPA 8260D	4.6	<0.200	<0.200	<0.200	<0.200	<0.200
Toluene - µg/L	EPA 8260D	1,100	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene - µg/L	EPA 8260D	15	<0.500	<0.500	<0.500	<0.500	<0.500
Xylenes (total) - µg/L	EPA 8260D	190	<1.50	<1.50	<1.50	<1.50	<1.50
Dichlorodifluoromethane - µg/L	EPA 8260D	200	**2.40**	**1.23**	**1.19**	**1.91**	<0.500
Trichlorofluoromethane- µg/L	EPA 8260D	5,200	<0.500	**0.704 J**	**0.683 J**	<0.500	<0.500
Tetrachloroethene - µg/L	EPA 8260D	41	<0.500	<0.500	<0.500	**0.864 J**	<0.500
Other VOCs - µg/L	EPA 8260D	Various	ND	ND	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PAHs) - µg/L	EPA 8270D-SIM	Various	ND	ND	ND	ND	-

Notes:

*	= See Appendix E for compounds tested, methods, and laboratory reporting limits
**	= Groundwater cleanup levels are listed in Table C, 18 AAC 75.345 (October 2018)
^	= Sample ID number preceded by "103880-" on the chain of custody form
µg/L	= micrograms per liter
<0.500	= Analyte not detected; laboratory limit of detection of 0.500 µg/L
2.40	= Analyte detected at a concentration less than the applicable ADEC cleanup level
ND	= Not detected
~	= Duplicate of Sample MW2
J	= Estimated concentration less than the limit of quantitation. See Appendix E for details.
BTOC	= Below Top of Casing

N

0 2 4

Miles

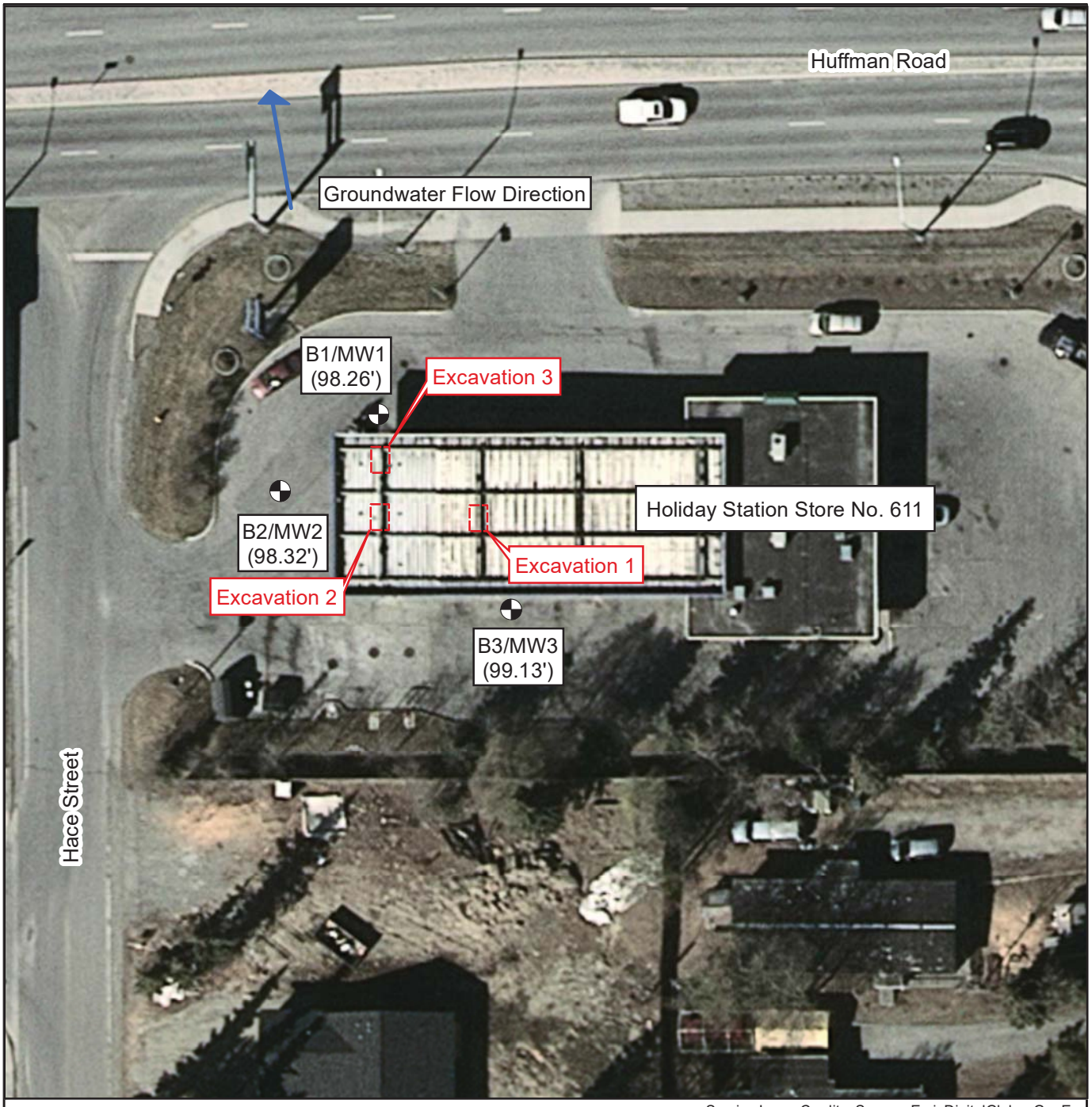
1530 Huffman Road
Anchorage, Alaska

VICINITY MAP

October 2020 103880-011

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIG. 1



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 40 80

Feet

Legend

Appoximate Location of Boring/Monitoring Well B1/MW1 advanced/installed by Shannon & Wilson on July 30, 2020

B1/MW1

Appoximate Location of the 2018 Dispenser Excavation

99.13'

Water level elevation measured according to a level loop survey conducted on August 5, 2020 and water level measurments recorded on August 3, 2020

N

1530 Huffman Road
Anchorage, Alaska

SITE PLAN

October 2020 103880-011

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIG. 2

APPENDIX A

SITE PHOTOGRAPHS

Photo 1: Looking northeast at the advancement of Boring B1. (July 30, 2020)

Photo 2: Looking south at Monitoring Well MW1. (July 30, 2020)

1530 Huffman Road
Anchorage, Alaska

PHOTOS 1 AND 2

October 2020 103880-011

Photo 4: Looking east at the advancement of Boring B3. (July 30, 2020)

Photo 4: Looking north at Monitoring Well MW3 (July 30, 2020)

1530 Huffman Road
Anchorage, Alaska

PHOTOS 3 AND 4

October 2020 103880-011

APPENDIX B

FIELD NOTES

7/30/20 HSS #611 RJR / EJT

0800 Met @ STW office to prep for drilling / sampling Activities.

0840 Depart office for site 1530 Huffman Rd. Check in with Store manager upon arrival. Calibrate PID #4 w/ 100 ppm Isobutylene (EJT)

0905 Drillers arrive onsite → prep for drilling

0920 Begin drilling B1 → Air knife to 5 ft

1030 Begin Augering / split spoon for B1

1145 Begin installing MW1 to 20 ft bgs

1235 Finish well installation DTW - 14.02, DTB - 19.40

1245 Begin drilling B2 → Air knife to 5 ft

1345 Drillers encounter construction debris while air knifing and cannot advance further. Step out 5 ft to NW

1415 Begin drilling step out of B2 → Air knife to 5 ft (until 1505)

1645 Begin installing MW-2

1740 Finish well installation DTW - 12.24 DTB - 19.25

1750 Begin drilling B3 → Air knife to 5 ft

1840 Begin Auger / split spoon for B3

1955 Finish drilling B3 → begin installing MW-3 to 20 ft bgs

2100 Finish installing MW-3 DTW - 15.15 DTB - 19.21

2140 Finish packing up / moving IDW. Depart site

2200 Finish Demob @ STW office. End of day

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIELD LOG OF GEOPROBE

PROBING COMPANY/DRILLER: Discovery Drilling
PROBE RIG EQUIPMENT: Geoprobe 7822DT
PROBING METHOD: HSA / Split spoon
PROBE DIAM.: TYP. RUN LENGTH: 5 Ft Auger / 2 Ft Split Spoon
WEATHER DURING DRILLING: 65° Sunny

JOB NO: 103880 PROBE NO: B1
JOB NAME: HSS #611
LOGGED BY: A. Rizzo
LOCATION: 1530 Huffman Rd. ELEV.:
START DATE: 7/30/20 END DATE: 7/30/20

PROBE RUN AND SAMPLE DATA

TIME / DATE	RUN NO.	RUN FROM / TO	LENGTH RECOVERED	FIELD CLASSIFICATION [Density/consistency, color, slightly, minor, MAJOR, then trace constituents; moisture; structure; other; (Geology) USCS classification.]	PID READING	SAMPLE NO.	SAMPLE DEPTH FROM / TO	SAMPLE PURPOSE OR COMMENT
7/30/20 0945				Brown sand w/ gravel; moist (med grained)	0.6	B1S1	0 / 2.5	
7/30/20 1010					0.3	B1S2	2.5 / 5.0	
7/30/20 1020	1	5 / 7	No Recovery		–	~~B1S3~~ AK	5.0 / 7.0	
7/30/20 1050	2	7 / a.	12"	Brown sand & with silt, minor gravel, Moist	0.3	B1S3	7.0 / 9.0	
7/30/20 1100	3	9 / 11	12"	Brown sand with silt and gravel moist	0.5	B1S4	9.0 / 11.0	
7/30/20 1115	4	11 / 13	12"		0.2	B1S5	11 / 13	
7/30/20 1125	5	13 / 15	18"	Brown sand with silt + gravel – med grained sand @ Bottom saturated at Bottom (15)	0.3	B1S6	13 / 15	
7/30/20 1133	6	15 / 17	18"	Medium grained sand with gravel, minor silt, grey; saturated	0.1	B1S7	15 / 17	

SUMMARY FIELD LOG OF GEOPROBE

DEPTH FROM	DEPTH TO	USCS CLASSIF.	GENERALIZED SOIL DESCRIPTION FOR DRAFTED GINT LOG

COMMENTS (i.e. materials used, visitors, problems, etc.):
Air knife from 0 – 5 ft.
6W1 – 13 – 15
6W – 15 – 20

GROUNDWATER DATA

WATER DEPTH	TIME	DATE
15	1120	7/30/20

SUMMARY OF TIME AND FOOTAGE

PROBE/SAMPLE _____ hrs. STANDBY: _____ hrs.
SETUP/CLEANUP: _____ hrs. DECON: _____ hrs.
OTHER: _____

BORING: _____ SHEET 1 OF 2

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIELD LOG OF GEOPROBE

PROBING COMPANY/DRILLER: Discovery Drilling
PROBE RIG EQUIPMENT: Geoprobe 7822DT
PROBING METHOD: HSA / split spoon
PROBE DIAM.: TYP. RUN LENGTH: 5 ft - 1 run & 5 ft - 5 splits
WEATHER DURING DRILLING: 65° Sunny

JOB NO: 103880 PROBE NO: B1
JOB NAME: HSS #611
LOGGED BY: A. Rizza
LOCATION: 1530 Hillman Rd ELEV.:
START DATE: 7/30/20 END DATE: 7/30/20

PROBE RUN AND SAMPLE DATA

TIME / DATE	RUN NO.	RUN FROM / TO	LENGTH RECOVERED	FIELD CLASSIFICATION [Density/consistency, color, slightly, minor, MAJOR, then trace constituents; moisture; structure; other; (Geology) USCS classification.]	PID READING	SAMPLE NO.	SAMPLE DEPTH FROM / TO	SAMPLE PURPOSE OR COMMENT
7/30/20 1140	7	17/19	12"	medium grained Sand w/ gravel minor silt, gry, saturated	0.7	B150	17/19	

SUMMARY FIELD LOG OF GEOPROBE

DEPTH FROM	DEPTH TO	USCS CLASSIF.	GENERALIZED SOIL DESCRIPTION FOR DRAFTED GINT LOG

COMMENTS (i.e. materials used, visitors, problems, etc.):

GROUNDWATER DATA

WATER DEPTH	TIME	DATE

SUMMARY OF TIME AND FOOTAGE

PROBE/SAMPLE _____ hrs. STANDBY: _____ hrs.
SETUP/CLEANUP: _____ hrs. DECON: _____ hrs.
OTHER: _____

BORING: _____ SHEET _____ OF _____

Shannon & Wilson, Inc.

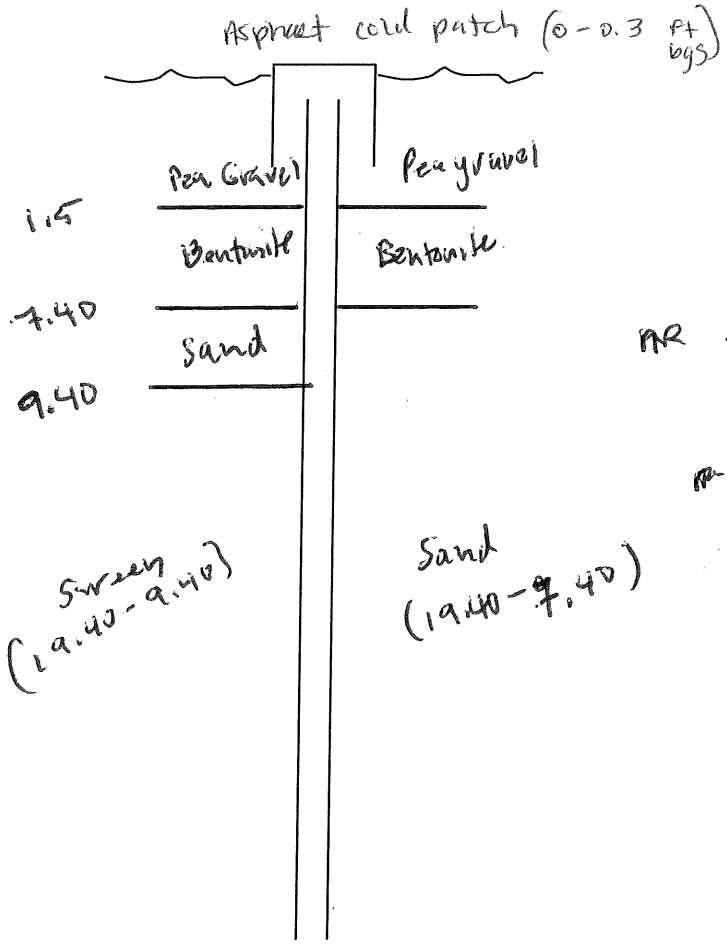
MONITORING WELL CONSTRUCTION DETAILS

Job No: 103380 Project: HSS # 611

Weather: 65° Sunny

Well No.: MW1

Date: 4/30/20 Time Started: 1145 Time Completed: 1235



WELL DATA:

Pipe Type: Sched 40

Diameter: 2"

Total Depth (ft bgs): 19.40

Well Screen Interval (feet): 19.40 - 9.40 (10)

Top of Well Screen (ft bgs): 9.40

Slot size: 0.010 prepack

Casing Connection: Threaded

Depth below surface: _____ N/A ☐

Casing stickup: _____ N/A ☒

PACKING MATERIAL:

	Depth below ground surface: From	To
~~Soil Cuttings:~~		
Sand (20-40):	19.40	7.40
Bentonite chips:	7.40	1.50
~~Sand (20-40)~~:	1.5	0.5
Pea Gravel		

NR

MONUMENT:

Flush Mount ☒ Post ☐

Monument height: _____ N/A ☐

Monument Diameter: 7" N/A ☐

LOCK:

Type: _____

Combination: _____

Length cutoff last section: _____

Remarks: _____

Time between installation/development: _____

Engineer or ~~Geologist~~: A. Rizzo

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIELD LOG OF GEOPROBE

PROBING COMPANY/DRILLER: Discovery Drilling
PROBE RIG EQUIPMENT: Geoprobe 7822DT
PROBING METHOD: HSA / Split Spoon 5ft Acetate
PROBE DIAM.: TYP. RUN LENGTH: 7ft Split Spoon
WEATHER DURING DRILLING: 68° Sunny

JOB NO: 1038BD
PROBE NO: B2
JOB NAME: HSS # 611
LOGGED BY: A. Rizzo
LOCATION: 1530 Huffman Rd
ELEV.:
START DATE: 7/30/20
END DATE: 7/30/20

PROBE RUN AND SAMPLE DATA

TIME / DATE	RUN NO.	RUN FROM / TO	LENGTH RECOVERED	FIELD CLASSIFICATION [Density/consistency, color, slightly, minor, MAJOR, then trace constituents; moisture; structure; other; (Geology) USCS classification.]	PID READING	SAMPLE NO.	SAMPLE DEPTH FROM / TO	SAMPLE PURPOSE OR COMMENT
7/30/20 AM ~~1305~~ 1440				Brown sand with gravel - moist (medium grained)	0.6	B2S1	0 / 2.5	
7/30/20 1500					0.5	B2S2	2.5 / 5.0	
7/30/20 1520	1	5 / 7	20"	Brown Sand with gravel, moist	1.4	B2S3	5.0 / 7.0	
7/30/20 1538	2	7 / 9	18"		1.3	B2S4	7.0 / 9.0	
7/30/20 1540	3	9 / 11	18"	Brown/gray sand with gravel, moist	0.4	B2S5	9.0 / 11.0	
7/30/20 1600	4	11 / 13	24"		0.3	B2S6	11 / 13	
7/30/20 1615	5	13 / 15	20"	Brown ~~gray~~ Sand with Gravel Saturated @ 15 ft bgs.	0.3	B2S7	13 / 15	
7/30/20 1625	6	15 / 17	18"	Brown/gray sand w/ gravel + fractured rock, Saturated	0.5	B2S8	15 / 17	

SUMMARY FIELD LOG OF GEOPROBE

DEPTH FROM	DEPTH TO	USCS CLASSIF.	GENERALIZED SOIL DESCRIPTION FOR DRAFTED GINT LOG

COMMENTS (i.e. materials used, visitors, problems, etc.):
Asphalt to 5 ft
GW1 - 13 - 15 ft
GW - 15 - 20 ft

GROUNDWATER DATA

WATER DEPTH	TIME	DATE

SUMMARY OF TIME AND FOOTAGE

PROBE/SAMPLE _____ hrs. STANDBY: _____ hrs.
SETUP/CLEANUP: _____ hrs. DECON: _____ hrs.
OTHER: _____

BORING: _____ SHEET _____ OF _____

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIELD LOG OF GEOPROBE

PROBING COMPANY/DRILLER: Discovery Drilling
PROBE RIG EQUIPMENT: Geoprobe 7822DT
PROBING METHOD: HSA / split spoon
PROBE DIAM.: TYP. RUN LENGTH: 5ft Macro 2ft split spoon
WEATHER DURING DRILLING: 68° Sunny

JOB NO: 103880 PROBE NO: B2
JOB NAME: HSS # 611
LOGGED BY: A. Rizzo
LOCATION: 1530 Huffman Rd ELEV.:
START DATE: 7/30/20 END DATE: 7/30/20

PROBE RUN AND SAMPLE DATA

TIME / DATE	RUN NO.	RUN FROM / TO	LENGTH RECOVERED	FIELD CLASSIFICATION [Density/consistency, color, slightly, minor, MAJOR, then trace constituents; moisture; structure; other; (Geology) USCS classification.]	PID READING	SAMPLE NO.	SAMPLE DEPTH FROM / TO	SAMPLE PURPOSE OR COMMENT
7/30/20 1035	7	17/19	18"	Saturated gray/brown sand with gravel/ trace. Rock	0.2	B259	17/19	

SUMMARY FIELD LOG OF GEOPROBE

DEPTH FROM	DEPTH TO	USCS CLASSIF.	GENERALIZED SOIL DESCRIPTION FOR DRAFTED GINT LOG

COMMENTS (i.e. materials used, visitors, problems, etc.):

GROUNDWATER DATA

WATER DEPTH	TIME	DATE

SUMMARY OF TIME AND FOOTAGE

PROBE/SAMPLE _____ hrs. STANDBY: _____ hrs.
SETUP/CLEANUP: _____ hrs. DECON: _____ hrs.
OTHER: _____

BORING: _____ SHEET _____ OF _____

Shannon & Wilson, Inc.

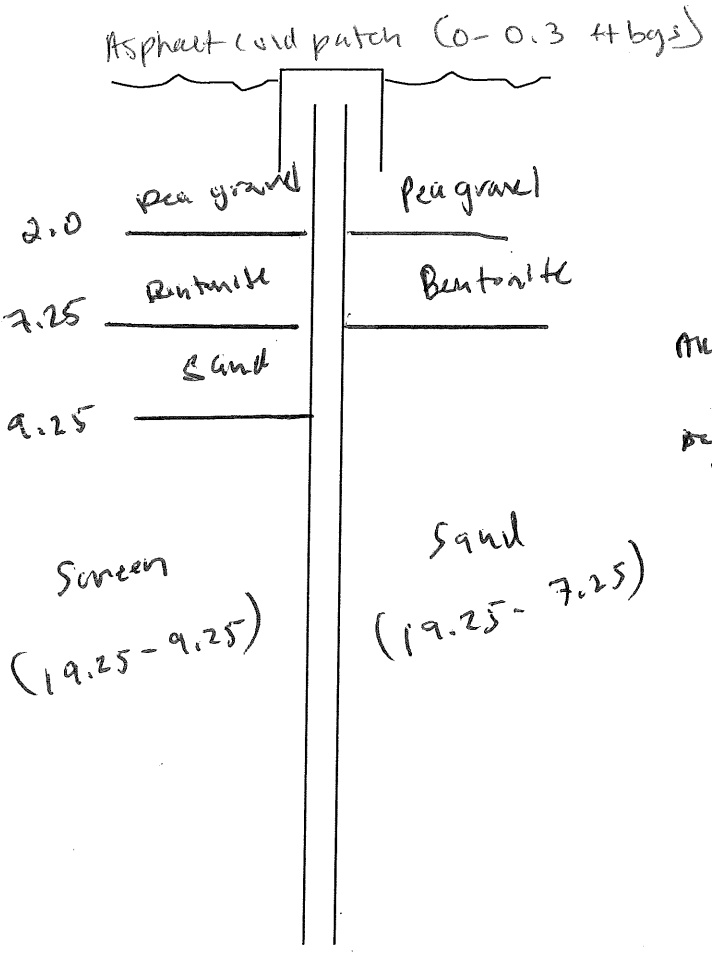
MONITORING WELL CONSTRUCTION DETAILS

Job No: 103880 Project: 1455 # 611

Weather: 68° sunny

Well No.: MW2

Date: 7/30/20 Time Started: 1645 Time Completed: 1740



WELL DATA:

Pipe Type: Sched 40

Diameter: 2"

Total Depth (ft bgs): 19.25

Well Screen Interval (feet): 19.25-9.25 (10)

Top of Well Screen (ft bgs): 9.25

Slot size: 0.010 prepack

Casing Connection: Threaded

Depth below surface: _____ N/A ☐

Casing stickup: _____ N/A ☒

PACKING MATERIAL:

	Depth below ground surface: From	To
~~Soil Cuttings:~~		
Sand (20-40):	19.25	7.25
Bentonite chips:	7.25	2.0
~~Sand~~ (20-40):	2.0	0

Pea Gravel

MONUMENT:

Flush Mount ☒ Post ☐

Monument height: _____ N/A ☒

Monument Diameter: 7" N/A ☐

LOCK:

Type: _____

Combination: _____

Length cutoff last section: _____

Remarks: _____

Time between installation/development: _____

Engineer or ~~Geologist~~: A. Razzo

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIELD LOG OF GEOPROBE

PROBING COMPANY/DRILLER: Discovery Drilling
PROBE RIG EQUIPMENT: Geoprobe 7822DT
PROBING METHOD: HSA/ Split Spoons
PROBE DIAM.: TYP. RUN LENGTH: 5 Ft Auger & 2 Ft Split Spoon
WEATHER DURING DRILLING: 60° Sunny

JOB NO: 103880 PROBE NO: B3
JOB NAME: HSS # 611
LOGGED BY: A. Rizzo
LOCATION: 1530 Huffman ELEV.:
START DATE: 7/30/20 END DATE: 7/30/20

PROBE RUN AND SAMPLE DATA

TIME / DATE	RUN NO.	RUN FROM / TO	LENGTH RECOVERED	FIELD CLASSIFICATION [Density/consistency, color, slightly, minor, MAJOR, then trace constituents; moisture; structure; other; (Geology) USCS classification.]	PID READING	SAMPLE NO.	SAMPLE DEPTH FROM / TO	SAMPLE PURPOSE OR COMMENT
7/30/20 1755				Brown Sand (med. grained) minor gravel; moist	0.5	B351	0/2.5	
7/30/20 1835				Brown Sand w/ gravel; moist	0.6	B352	2.5/5.0	
7/30/20 1900	1	5/7	18"		0.8	B353	5.0/7.0	
7/30/20 1910	2	7/9	24"		0.8	B354	7.0/9.0	
7/30/20 1920	3	9/11	18"		1.0	B355	9.0/11.0	
7/30/20 1930	4	11/13	18"	Brown sand w/ gravel, minor silt; moist	0.2	B356	11.0/13.0	
7/30/20 1938	5	13/15	24"	Brown sand w/ silt & gravel moist. Saturated	0.6	B357 B3517	13.0/15.0	Dup - B3517
7/30/20 1948	6	15/17	24"	Brown/gray Sand with gravel. Saturated	0.3	B358	15.0/17.0	

SUMMARY FIELD LOG OF GEOPROBE

DEPTH FROM	DEPTH TO	USCS CLASSIF.	GENERALIZED SOIL DESCRIPTION FOR DRAFTED GINT LOG

COMMENTS (i.e. materials used, visitors, problems, etc.):
Air Knife from 0-5 ft
GWI - 13-15 ft
GW - 15 ft - 20 ft

GROUNDWATER DATA

WATER DEPTH	TIME	DATE

SUMMARY OF TIME AND FOOTAGE

PROBE/SAMPLE _____ hrs. STANDBY: _____ hrs.
SETUP/CLEANUP: _____ hrs. DECON: _____ hrs.
OTHER: _____

BORING: _____ SHEET _____ OF _____

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIELD LOG OF GEOPROBE

PROBING COMPANY/DRILLER: Discovery Drilling
PROBE RIG EQUIPMENT: Geoprobe 7822DT
PROBING METHOD: HSA / split spoon
PROBE DIAM.: _____ TYP. RUN LENGTH: _____
WEATHER DURING DRILLING: 66° Sunny

JOB NO: 103080 PROBE NO: B3
JOB NAME: HSS #611
LOGGED BY: A. Rizzo
LOCATION: 1530 Huffman ELEV.: _____
START DATE: 7/30/20 END DATE: 7/30/20

PROBE RUN AND SAMPLE DATA

TIME / DATE	RUN NO.	RUN FROM	RUN TO	LENGTH RECOVERED	FIELD CLASSIFICATION [Density/consistency, color, slightly, minor, MAJOR, then trace constituents; moisture; structure; other; (Geology) USCS classification.]	PID READING	SAMPLE NO.	SAMPLE DEPTH FROM	SAMPLE DEPTH TO	SAMPLE PURPOSE OR COMMENT
7/30/20 2000	7	17	19	24"	Brown sand w/ gravel + minor silt, saturated	0.4	B359	17	19	

SUMMARY FIELD LOG OF GEOPROBE

DEPTH FROM	DEPTH TO	USCS CLASSIF.	GENERALIZED SOIL DESCRIPTION FOR DRAFTED GINT LOG

COMMENTS (i.e. materials used, visitors, problems, etc.):

GROUNDWATER DATA

WATER DEPTH	TIME	DATE

SUMMARY OF TIME AND FOOTAGE

PROBE/SAMPLE _____ hrs. STANDBY: _____ hrs.
SETUP/CLEANUP: _____ hrs. DECON: _____ hrs.
OTHER: _____

BORING: _____ SHEET _____ OF _____

Shannon & Wilson, Inc.

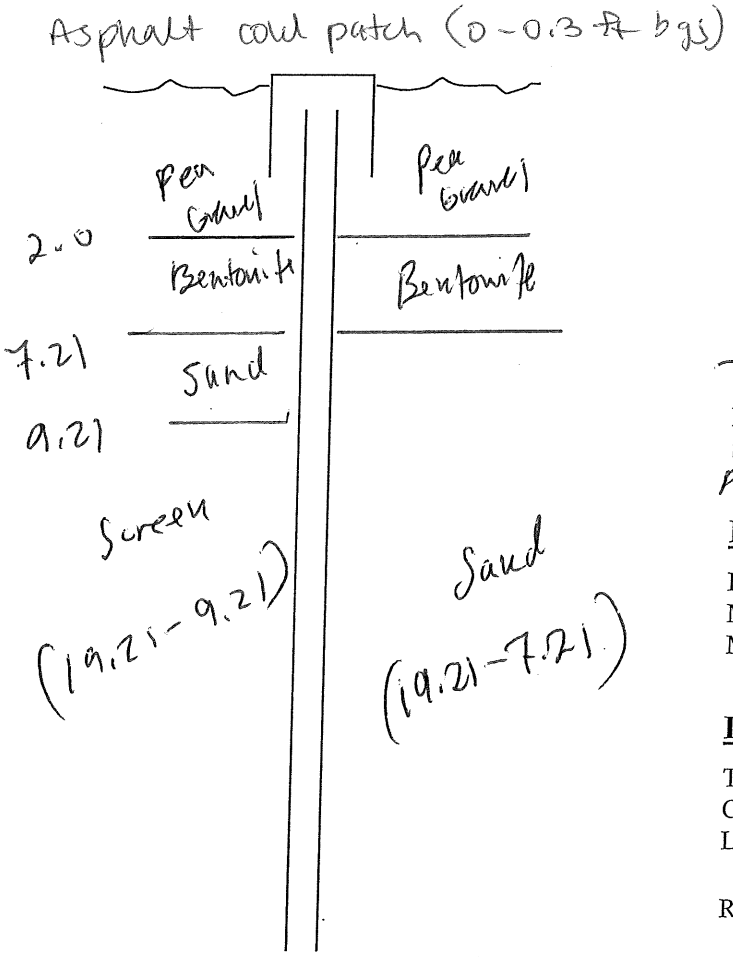
MONITORING WELL CONSTRUCTION DETAILS

Job No: 103880 Project: HSI # 611

Weather: 66° Sunny

Well No.: MW 3

Date: 7/30/20 Time Started: 1955 Time Completed: 2100



WELL DATA:

Pipe Type: Sch 40

Diameter: 2"

Total Depth (ft bgs): 19.21

Well Screen Interval (feet): 19.21 - 9.21 (10)

Top of Well Screen (ft bgs): 9.21

Slot size: 0.010 pre pack

Casing Connection: Threaded

Depth below surface: _____ N/A ☐

Casing stickup: _____ N/A ☒

PACKING MATERIAL:

	Depth below ground surface: From	To
~~Soil Cuttings:~~		NA
Sand (20-40):	NA ~~19.25~~ 19.21	7.21
Bentonite chips:	7.21	2.0
~~Sand (20-40):~~ Pea Gravel	2.0	0.5

MONUMENT:

Flush Mount ☒ Post ☐

Monument height: _____ N/A ☒

Monument Diameter: 7" N/A ☐

LOCK:

Type: _____

Combination: _____

Length cutoff last section: _____

Remarks: _____

Time between installation/development: _____

Engineer or Geologist: A. Rizzo

Shannon & Wilson, Inc.

WELL DEVELOPMENT LOG

Job No: 103580 Location: HSS #611 Weather: 59° cloudy
Concern: _____ Well No.: MW-1
Develop Date: 8/3/20 Time Started: 0900 Time Completed: 1220

PURGING DATA

Measuring Point (MP): (Top of PVC Casing) / Top of Steel Protective Casing / Other: _____
Time of Depth Measurement: 0905
Diameter of Casing: 1" ☐ 2" ☒
Total Depth of Well Below MP: 19.32
Depth-to-Water (DTW) Below MP: 14.06
Water Column in Well: 5.26 (Total Depth of Well Below MP - DTW Below MP)
Gallons per foot: 0.16
Gallons in Well: 0.84 (Water Column in Well x Gallons per foot)
Three Well Volumes: 2.52 (Gallons in Well x 3)
Gallons Purged: 8.80

DEVELOPMENT DATA

Odor: None Color: Brown - Silty

DTW	Time:	Gallons:	Temp: (°C)	Sp. Cond.: ~~(mS/cm)~~ µS	pH: (S.U.)	ORP: (mV)	Turb: (ntu)	
—	0938	0.75	10.8	~~3,669~~ NR 3669	4.92	46	>1000	
18.91	0952	~~1.6~~ NR 1.55	9.1	3640	5.23	-98	>1000	purged Dry
14.25	1011	~~2.105~~ NR 2.75	9.7	3700	5.90	-96	>1000	
18.63	1024	3.75	10.6	3579	5.83	-91	>1000	purged Dry
18.68	1044	4.65	8.0	3376	5.82	-62	>1000	purged dry
18.63	1105	5.55	8.4	3477	5.88	-56	>1000	purged Dry
18.71	1128	6.55	8.1	3571	6.08	-59	>1000	purged Dry
18.64	1149	8.05	9.2	3590	6.15	-51	>1000	purged dry
18.72	1212	8.80	8.3	3593	6.10	-62	>1000	purged dry

Surging	Surging Time (minutes)	Gallons Purged	Purging Time (minutes)	
1	924 - 929	0.75	0933 - 0938	
2	0940 - 0945	0.80	0948 - 0952	purged Dry
3	1000 - 1005	1.2	1006 - 1011	
4	1012 - 1017	1.0	1020 - 1024	purged Dry
5	1034 - 1039	0.9	1040 - 1044	purged dry
6	1054 - 1059	0.9	1101 - 1105	purged dry

Evacuation Method: Proactive Pump / Other: Mini whale Surge Block: 2"
Remarks: 2 hrs of effort = End development

Sampling Personnel: AJR

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16
ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

Additional Purge/Surge Data

~~WELL DEVELOPMENT LOG~~

Job No: 103880 Location: HSS # 611 Weather: 59° cloudy

Concern: Well No.: MW-1

Date: 8/3/20 Time Started: 0900 Time Completed: 1220

DEVELOPMENT DATA CONTINUED

~~Time:~~ Surging	~~Gallons:~~ Surging	~~Temp:~~ (°C) Time	~~Sp. Cond.:~~ (mS/cm)	~~pH:~~ (S.U.) Surging	~~ORP:~~ (mV) Time	~~Turb:~~ (ntu)	
~~#27~~							
7	1117 -	1122	1.0	1124 -	1128		purged dry
8	1138 -	1143	1.5	1145 -	1149		purged dry
9	1202 -	1207	0.75	1208 -	1212		purged dry

Remarks:

Sampling Personnel:

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16

ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

WELL PURGED DRY LOG

Job No: 103880 Location: HSS # 611 Weather: 59° Cloudy
Concern: _____ Well No.: MW-1
Date: 8/3/20 Time Started: 1300 Time Completed: 1400

INITIAL GROUNDWATER LEVEL DATA

Time of Depth Measurement: 0905 Date of Depth Measurement: 8/3/20
Measuring Point (MP): Top of PVC Casing / Top of Steel Protective Casing / Other: _____
Diameter of Casing: 2" Well Screen Interval: —
Total Depth of Well Below MP: 19.32 Product Thickness, if noted: —
Depth-to-Water (DTW) Below MP: 14.06
Water Column in Well: 5.26 (Total Depth of Well Below MP - DTW Below MP)
Gallons per foot: 0.16
Gallons in Well: 0.84 (Water Column in Well x Gallons per foot)

PURGING DATA

Date Purged: 8/3/20 Time Started: ~~1320~~ 1320 Time Completed: 1335
80% Recovery Water Column: 4.21 (Water Column in Well x 0.8)
80% Recovery DTW: 15.11 (Initial DTW + (Water Col. – 80% Recovery Water Col.)

Time Well Purged Dry	Time Well Was 80% Recovered	DTW	Pump Rate
1212	1300	14.06	0.3

100% recharge

FIELD PARAMETERS AT TIME OF SAMPLING

Time:	Gallons:	Pump Rate (L/min):	DTW (ft BMP):	Drawdown (ft BMP):	Temp: (°C)	Sp. Cond.: (uS/cm)	pH: (S.U.)	ORP: (mV)	Turb: (NTU)
1325	0.4	0.3	14.27	0.21	8.83	5898	5.10	210.0	374.6

SAMPLING DATA

Odor: None Color: grey/brown – silty
Sample Designation: 103880-MW1 Time / Date: 1330 8/3/20
QC Sample Designation: _____ Time / Date: _____
QA Sample Designation: _____ Time / Date: _____

Evacuation Method: Whale Pump/Bladder Pump / Other: Mini
Sampling Method: Whale Pump/Bladder Pump / Other: Mini

Remarks: _____

Sampling Personnel: AJK

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16
ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

WELL DEVELOPMENT LOG

HSS #601

Job No: 103880 Location: Holiday Store Huffman Rd. Weather: 58° cloudy

Concern: Well No.: MW2

Develop Date: ~~7/30/20~~ AR 8/3/20 Time Started: 9:30 Time Completed: 12:35

PURGING DATA

Measuring Point (MP): (Top of PVC Casing) / Top of Steel Protective Casing / Other:

Time of Depth Measurement: 09:32

Diameter of Casing: 1" ☐ 2" ☑

Total Depth of Well Below MP:	19.20	
Depth-to-Water (DTW) Below MP:	14.05	
Water Column in Well:	5.15	(Total Depth of Well Below MP - DTW Below MP)
Gallons per foot:	0.16	
Gallons in Well:	0.82	(Water Column in Well x Gallons per foot)
Three Well Volumes:	2.47	(Gallons in Well x 3)
Gallons Purged:	31.50	

DEVELOPMENT DATA

Odor: None Color: Brown

DTW	Time:	Gallons:	Temp: (°C)	Sp. Cond.: (mS/cm)	pH: (S.U.)	ORP: (mV)	Turb: (ntu)
14.21	09:48	1.0	10.2	>4000	6.64	-10	1007
14.24	09:59	2.25	9.5	>4000	6.79	-65	986
14.20	10:10	3.5	9.4	>4000	6.78	-113	698.41
14.10	10:21	6.0	8.3	>4,000	6.83	-95	447.4
14.10	10:33	8.5	8.3	>4,000	6.66	-75	832.1
14.12	10:45	11.0	8.0	>4,000	6.61	-55	1,100

Surging	Surging Time (minutes)	Gallons Purged	Purging Time (minutes)
1	09:35 - 09:40 (5)	1.0	09:42 - 09:47 (5)
2	09:48 - 09:53 (5)	2.25	09:53 - 09:58 (5)
3	09:58 - 10:03 (5)	3.5	10:04 - 10:09 (5)
4	10:10 - 10:15 (5)	6.0	10:16 - 1021 (5)
5	10:22 - 10:27 (5)	8.5	10:28 - 10:33 (5)
6	10:35 - 10:40 (5)	11.0	10:40 - 10:45 (5)

Evacuation Method: Proactive Pump / Other: Single Whale Surge Block: 2ft

Remarks:

Sampling Personnel: ZJT

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16
ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

WELL DEVELOPMENT LOG

HSS #611

Job No: 103880 Location: Holiday Store Huffman Rd Weather: 59° cloudy

Concern: _____ Well No.: MW2

Date: 8/3/20 Time Started: 9:35 Time Completed: 12:35

DEVELOPMENT DATA CONTINUED

~~Time:~~ (Surge Time)	~~Gallons:~~ (Gal Purge)	~~Temp:~~ ~~(°C)~~	~~Sp. Cond.:~~ ~~(mS/cm)~~ (Purge Time)	~~pH:~~ ~~(S.U.)~~	ORP: (mV)	Turb: (ntu)
10:50 - 10:55		13.5	10:55 - 11:00			
11:02 - 11:07		16.0	11:07 - 11:12			
11:14 - 11:19		18.5	11:20 - 11:25			
11:26 - 11:31		21.0	11:31 - 11:36			
11:38 - 11:43		23.5	11:44 - 11:49			
11:50 - 11:55		26.0	11:56 - 12:01			
12:03 - 12:08		28.5	12:09 - 12:14			
12:16 - 12:21		31.5	12:23 - 12:28			

Remarks: _____

Sampling Personnel: ZJT

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16

ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

WELL DEVELOPMENT LOG

Job No: 103880 Location: Holiday Station Huffman Rd HSS #611 Weather: 59° cloudy

Concern: _____ Well No.: MW2

Date: 8/3/20 Time Started: 9:30 Time Completed: 12:35

DEVELOPMENT DATA CONTINUED

DTW	Time:	Gallons:	Temp: (°C)	Sp. Cond.: (mS/cm)	pH: (S.U.)	ORP: (mV)	Turb: (ntu)
14.15	11:00	13.5	8.2	>4,000	6.62	-33	1075
14.15	11:13	16.0	8.0	>4,000	6.63	-93	907.2
14.12	11:25	18.5	8.0	>4,000	6.54	-53	1015
14.15	11:36	21.0	7.9	>4,000	6.71	-42	684.2
14.15	11:49	23.5	8.0	>4,000	6.64	-41	543.6
14.00	12:01	26.0	8.0	>4,000	6.63	-42	595.9
14.10	12:15	28.5	8.2	>4,000	6.59	-26	762.7
14.10	12:29	31.5	8.3	>4000	6.63	-5	339.6

Remarks: _____

Sampling Personnel: ZST

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16

ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

LOW-FLOW WATER SAMPLING LOG

HSS #1611

Job No: 103880 Location: Holiday Store Huffman Rd Weather: 60° cloudy

Well No.: MW2

Date: 8/3/20 Time Started: 12:35 Time Completed: 1410

Develop Date: ~~7/30/20~~ 8/3/20 Develop End Time: PM (24 hour break)

INITIAL GROUNDWATER LEVEL DATA

Time of Depth Measurement: 09:32 Date of Depth Measurement: 8/3/20

Measuring Point (MP): Top of PVC Casing / Top of Steel Protective Casing / Other: —

Diameter of Casing: 2" Well Screen Interval: —

Total Depth of Well Below MP: 19.20 Product Thickness, if noted: —

Depth-to-Water (DTW) Below MP: 14.10

Water Column in Well: 5.10 (Total Depth of Well Below MP - DTW Below MP)

Gallons per foot: 0.16

Gallons in Well: 0.82 (Water Column in Well x Gallons per foot)

PURGING DATA

Date Purged: 8/3/20 Time Started: 12:47 Time Completed: 1350

Three Well Volumes: 2.45 (Gallons in Well x 3)

Gallons Purged: 2.20 Depth of Pump ~~(generally 2 ft from bottom)~~: 16.0 ft

Max. Drawdown (generally 0.3 ft): 0.0 Pump Rate: 0.3 L/min

Well Purged Dry: Yes ☐ No ☑ (If yes, use Well Purged Dry Log)

Time:	Gallons:	Pump Rate (L/min):	DTW (ft BMP):	Drawdown (ft):	Temp: (°C)	Sp. Cond.: mS/cm	DO: (mg/L)	pH: (S.U.)	ORP: (mV)	Turb: (NTU)
12:50	0.25	0.3	14.09	+0.01	11.53	10.6	2.04	5.99	4	480.7
12:53	0.50	0.3	14.09	+0.01	10.97	10.7	1.92	6.02	-8	276.1
12:56	0.75	0.3	14.10	0.0	11.00	10.6	1.73	6.04	-17	194.1
12:59	1.0	0.3	14.10	0.0	11.09	10.5	1.70	6.04	-19	151.8
13:02	1.25	0.3	14.10	0.0	11.05	10.5	1.66	6.05	-22	126.9
13:05	1.50	0.3	14.10	0.0	11.00	10.5	1.62	6.06	-24	115.5

SAMPLING DATA

Odor: None Color: clear w/ ~~tan~~ tan hue

Sample Designation: 103880-MW2 Time / Date: 8/3/20 13:30

QC Sample Designation: 103880 = MW2 Time / Date: 8/3/20 1400

QA Sample Designation: — Time / Date: —

Evacuation Method: Submersible Pump / Other: Single whale

Sampling Method: Submersible Pump / Other: Single whale

Water Quality Instruments Used/Manufacturer/Model Number: Horiba & Turbidimeter

Calibration Info (Time, Ranges, etc) 12:35 8/30/20

Remarks: —

Sampling Personnel: ZST

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16 4" = 0.65

ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

LOW-FLOW WATER SAMPLING LOG

Continued from previous page

Job No: 103886 Location: Holiday Store Huffman #611 Site:
Well No.: MW2
Date: 8/3/20

Time:	Gallons:	Pump Rate (L/min):	DTW (ft BMP):	Drawdown (ft):	Temp: (°C)	Sp. Cond (uS/cm)	DO (mg/L)	pH: (S.U.)	ORP: (mV)	Turb: (NTU)
13:08	1.75	0.3	14.10	0.0	10.98	10.5	1.57	6.07	-25	95.36
13:11	2.0	0.3	14.10	0.0	10.99	10.5	1.55	6.08	-26	92.84
13:14	2.20	0.3	14.10	0.0	10.97	10.5	1.58	6.09	-26	93.23

	Interval (minutes)	Pump Rate (mL/min):	Drawdown (ft):	Temp: (°C)	Sp. Cond.: (uS/cm)	DO (mg/L)	pH: (S.U.)	ORP: (mV)	Turb: (NTU)
ADEC May 2010)	3 to 5	100 to 150	<0.0328	±3% or ±0.2	±3%	±10%	±0.1	±10	±10%
EPA Jan. 2010)	5	50	<0.3	±3%	±3%	±10%	±0.1	±10	±10% or <5 NTU

EPA guidance requires all parameters to stabilize for 3 consecutive readings before sampling. If not stable within 2 hours, collect sample.
ADEC guidance requires 3 parameters (4 if using temperature) to stabilize for 3 consecutive readings before sampling.

Shannon & Wilson, Inc.

WELL DEVELOPMENT LOG

Job No: 103880 Location: Holiday Store Huffman Rd Weather: 60° cloudy
Concern: _____ Well No.: MW3
Develop Date: 8/3/20 Time Started: ~~2:15~~ AK 14:15 Time Completed: 17:15

PURGING DATA

Measuring Point (MP): ~~Top of PVC Casing~~ / Top of Steel Protective Casing / Other: _____
Time of Depth Measurement: 14:27
Diameter of Casing: 1" ☐ 2" ☑
Total Depth of Well Below MP: 19.05
Depth-to-Water (DTW) Below MP: 14.43
Water Column in Well: 4.62 (Total Depth of Well Below MP - DTW Below MP)
Gallons per foot: 0.16
Gallons in Well: 0.74 (Water Column in Well x Gallons per foot)
Three Well Volumes: 2.22 (Gallons in Well x 3)
Gallons Purged: _____

DEVELOPMENT DATA

Odor: None Color: Brown - silty

DTW	Time:	Gallons:	Temp: (°C)	Sp. Cond.: (mS/cm)	pH: (S.U.)	ORP: (mV)	Turb: (ntu)
18.60	14:45	0.75	13.0	2944	6.61	-193	>1000
18.6	15:15	1.25	12.4	2651	6.56	-148	>1000
17.40	15:40	2.0	13.9	2736	6.76	-99	>1000
18.65	15:55	2.75	10.6	2692	6.75	-59	>1000
18.63	16:25	3.25	13.5	2733	6.69	-11	>1000
18.67	16:55	3.75	11.3	2693	6.83	-156	>1000

Surging	Surging Time (minutes)	Gallons Purged	Purging Time (minutes)	
1	14:34 - 14:39 (5)	0.75	14:40 - 14:45	Purged Dry
2	15:05 - 15:10	AK ~~1.25~~ 0.50	15:10 - 15:15	Purged Dry
3	15:30 - 15:35	AK ~~2.0~~ 0.75	15:35 - 15:40	
4	15:41 - 15:46	AK ~~2.75~~ 0.75	15:50 - 15:55	Purged Dry
5	16:15 - 16:20	0.50	16:22 - 16:25	Purged Dry
6	16:40 - 16:45	0.50	1650 - 1655	purged Dry

Evacuation Method: Proactive Pump / Other: Single Whale Surge Block: 2'
Remarks: 3 hrs of effort → well developed

Sampling Personnel: JST ASR

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16
ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

Shannon & Wilson, Inc.

WELL PURGED DRY LOG

Job No: 103880 Location: HSS #611 Weather: 65° partly cloudy
Concern: Well No.: MW-3
Date: 8/3/20 Time Started: 1715 Time Completed: 1750

INITIAL GROUNDWATER LEVEL DATA

Time of Depth Measurement: 1427 Date of Depth Measurement: 8/3/20
Measuring Point (MP): (Top of PVC Casing) / Top of Steel Protective Casing / Other:
Diameter of Casing: 2" Well Screen Interval: —
Total Depth of Well Below MP: 19.05 Product Thickness, if noted:
Depth-to-Water (DTW) Below MP: 14.43
Water Column in Well: 4.62 (Total Depth of Well Below MP - DTW Below MP)
Gallons per foot: 0.16
Gallons in Well: 0.74 (Water Column in Well x Gallons per foot)

PURGING DATA

Date Purged: 8/3/20 Time Started: 1720 Time Completed: 1730
80% Recovery Water Column: 3.70 (Water Column in Well x 0.8)
80% Recovery DTW: 15.35 (Initial DTW + (Water Col. – 80% Recovery Water Col.)

Time Well Purged Dry	Time Well Was 80% Recovered	DTW	Pump Rate
1655	1715	14.75	0.3

FIELD PARAMETERS AT TIME OF SAMPLING

Time:	Gallons:	Pump Rate (L/min):	DTW (ft BMP):	Drawdown (ft BMP):	Temp: (°C)	Sp. Cond.: (uS/cm)	pH: (S.U.)	ORP: (mV)	Turb: (NTU)
1723	0.2	0.3	15.21	0.78	11.8	2843	6.44	-94	787.0

SAMPLING DATA

Odor: None Color: Brown – Silty
Sample Designation: 103880-MW3 Time / Date: 1725 8/3/20
QC Sample Designation: / Time / Date:
QA Sample Designation: / Time / Date:

Evacuation Method: Whale Pump/Bladder Pump / Other: Mini whale
Sampling Method: Whale Pump/Bladder Pump / Other: Mini whale

Remarks:

Sampling Personnel: AJR

WELL CASING VOLUMES (GAL/FT): 1" = 0.04 2" = 0.16
ANNULAR SPACE VOLUME (GAL/FT): 4" casing and 2" well = 0.23

8/3/20 HSS #611 AJR / ZJT

0800 Meet @ STW office. Prep for sampling / Developing
0840 Depart office for site
0855 Arrive onsite → prep for sampling + inform staff upon arrival. Calibrate Hanna sticks for parameters
0900 @ MW-1
0930 @ MW-2
1220 Finish developing MW-1 → purged dry. Await recharge
1235 Finish decon → begin purging MW-2 to sample
1300 Begin sampling / purging MW-1.
1400 Done @ MW-1 → AJR to dump purge water
1410 Done @ MW-2 (Dup collected MW-12)
1415 ZJT @ MW-3 → begin developing
1230 *Back Note* Calibrate Horiba + YSI for sampling
1750 Finish @ MW-3.
1805 Leave site after packing up. Left 5 drums, 3 soil and 2 purge water.
1830 End of day → Finish demob @ office

9/15/20 HSS # 611 AJR/ZJT

SHANNON & WILSON, INC.

Table 1
Differential Leveling Survey Field Log Sheet and Instructions

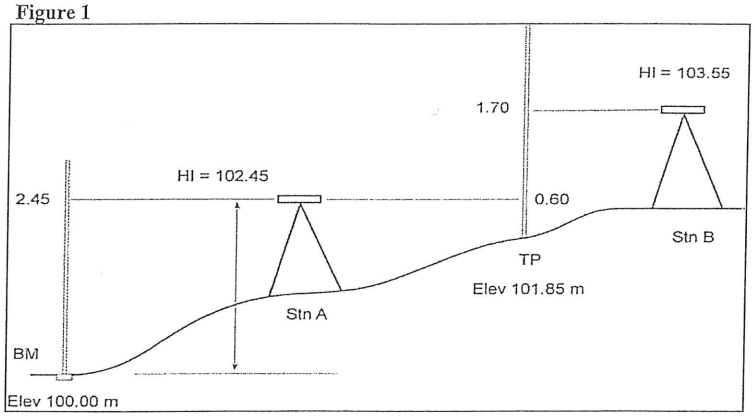
Station or Survey Point ID	Backsight (BS) (+)	Height of Instrument (HI)	Foresight (FS) (-)	Elevation	Comments
TBM	3.06	103.06		100'	TBM Bollard on NW corner of Building
MW-1			4.80	98.26	
MW-2			4.74	98.32	
MW-3			3.93	99.13	
TP1 (MW-3)	5.28	104.41	4.41	99.13	Instrument Moved
MW-1			6.15	98.26	
TP2					
TBM					Final shot back on TBM to close the Loop.
Sum of TBM & TP FS and BS	8.34		8.34		

Example of Completed Survey

Station or Survey Point ID	Backsight BS (+)	Height of Instrument (HI)	Foresight (FS) (-)	Elevation	Comments
TBM	5.20	1422.04		1416.84	Temporary benchmark w elevation of 1416.84 feet
MW-5			1.40	1420.64	Monitoring well 5
MW-21			3.44	1418.60	
TP1	5.26	1421.46	5.84	1416.20	Instrument moved to new location
MW-23			2.72	1418.74	
MW-24			2.51	1418.95	
MW-22			4.48	1416.98	
MW-8			5.43	1416.03	
TP2	5.52	1421.81	5.17	1416.29	New instrument location to shoot back to TBM
TBM			4.98	1416.83	Final shot back on TBM to close the loop.
Sum of	15.98		15.99		**The Sum of the BS for the TBM and TPs should be within 0.01 of the Sum of the FS for the TBM and TP readings. The difference between these sums will also be equal to the difference between the original TBM and final TBM elevation.**

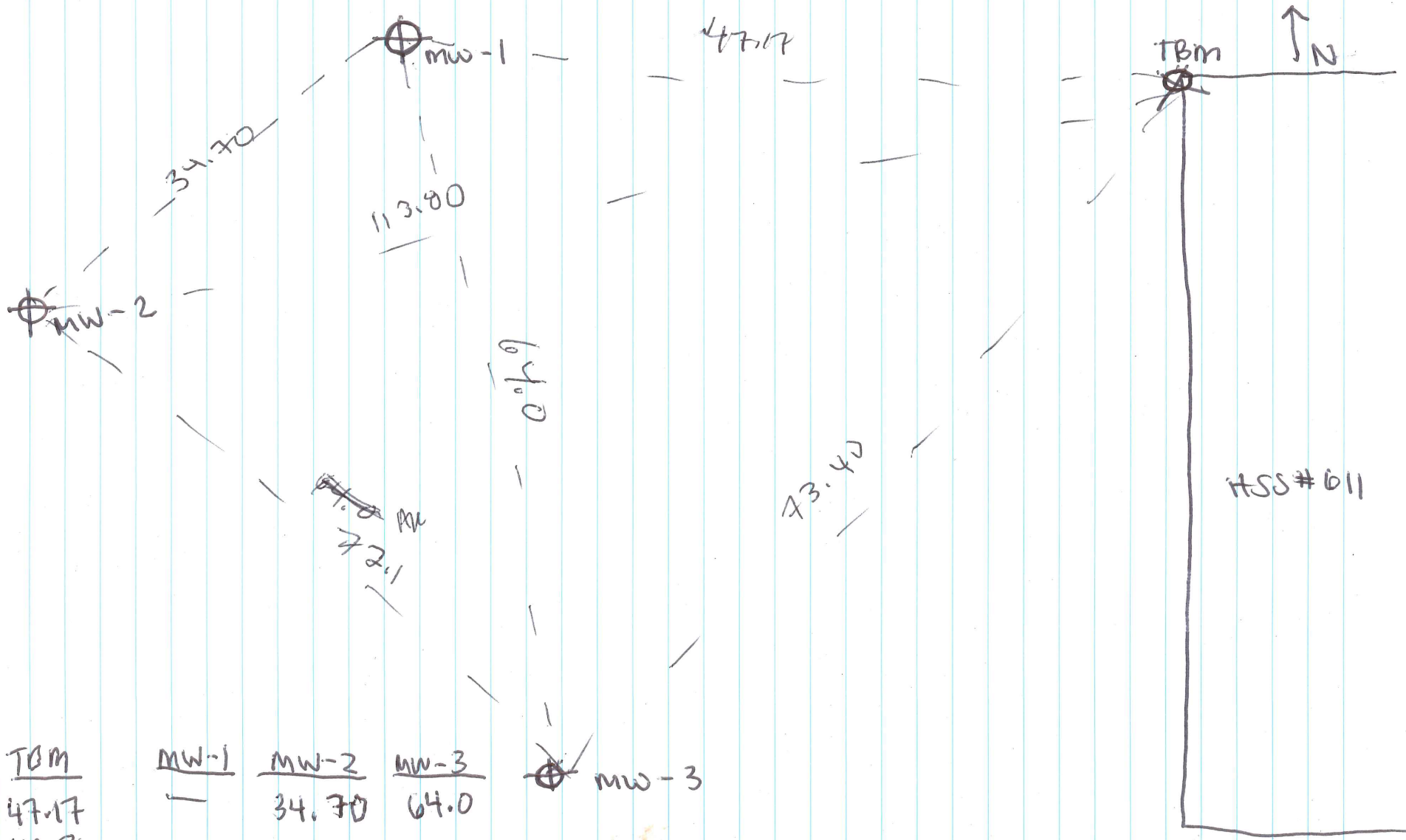
Figure 1 below shows an example of a traverse with one turning point. The traverse carries an elevation from a known benchmark (BM) to the top of a hill. From the first set-up (Stn A), a BS reading is taken to the BM (Elev. = 100.00). Suppose the rod reading is 2.45 meters: the HI @ Stn A is therefore 100.00 + 2.45= 102.45 m. Suppose you then take a FS to another point, and read 0.60 on the rod; the elevation of that point is HI-FS = 102.45-0.60 = 101.85 meters. If you move the instrument, you use that point to turn on, i.e. you move to the top of the hill and take a BS to the rod. The new HI is 101.85 + 1.70 = 103.55.

Figure 1



Instructions for Completing a Survey

* Make sure you have a site map
* An accurate survey must have two turning points.
* When tying in new wells to an existing survey, the TBM should not be a well and the survey must have at least one turning point.
* For small sites with few measuring points, the site should be resurveyed rather than tying in one or two additional wells (discuss with PM and cofirm time is available in budget).
* For large sites with many measuring points, covering a large area, additional wells should be tied in to existing survey.

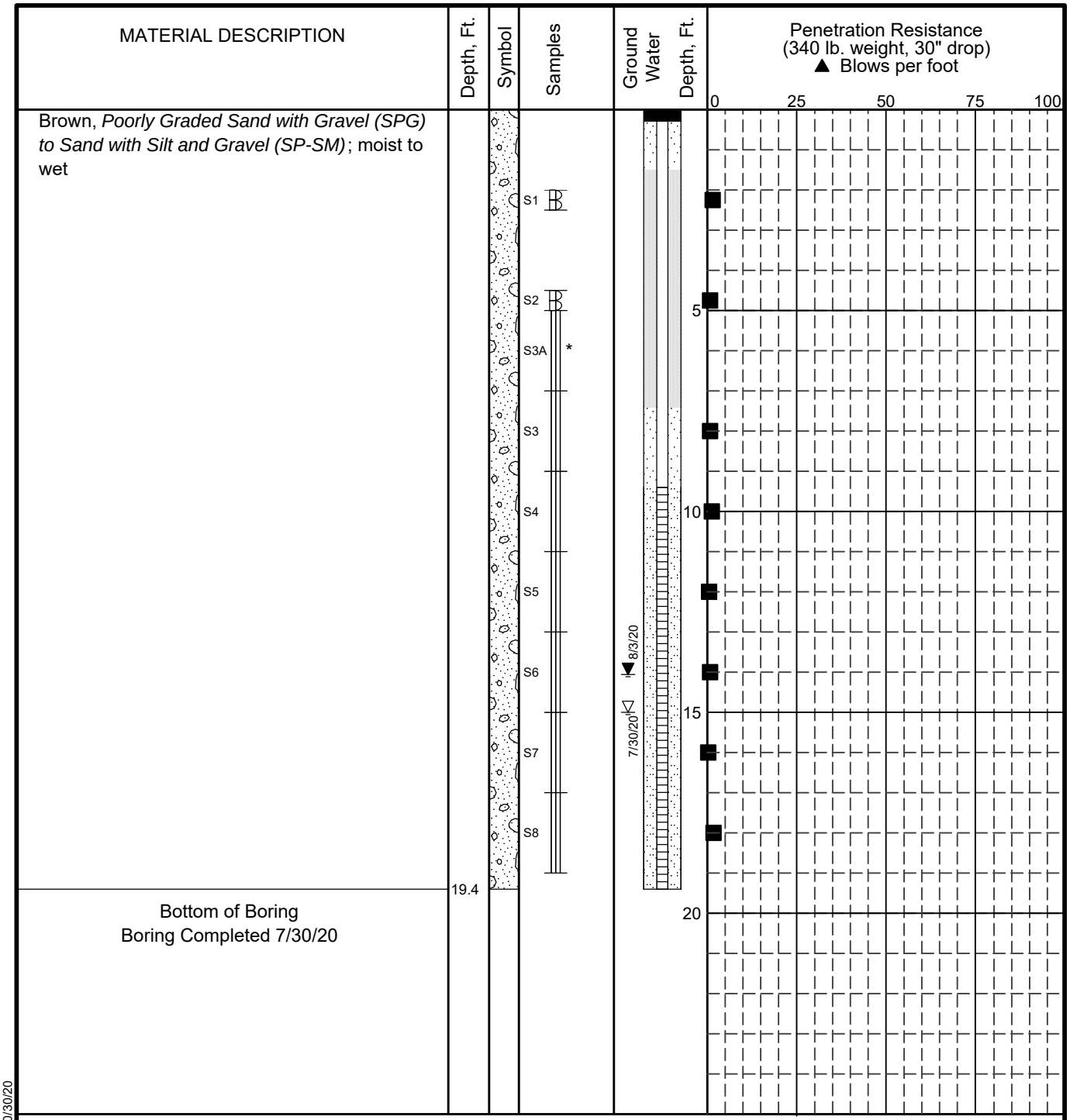


	TBM	MW-1	MW-2	MW-3
MW-1	47.17	—	34.70	64.0
MW-2	113.80		—	72.1
MW-3	73.40			—

Rotten in the Rain

APPENDIX C

BORING LOGS AND MONITORING WELL CONSTRUCTION DETAILS



LEGEND

* Sample not recovered	Ground Water Level At Time Of Drilling
3" O.D. Split Spoon Sample	Static Water Level
Grab Sample	Solid Casing, Sand Pack
	Solid Casing and Annular Seal
	Slotted Section, Filter Sand
	Solid Casing, Cuttings Backfill

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
3. Water level, if indicated above, is for the date specified and may vary.
4. USC letter symbol based on visual classification.

1530 Huffman Road
Anchorage, Alaska

LOG OF BORING B1

October 2020 103880-011

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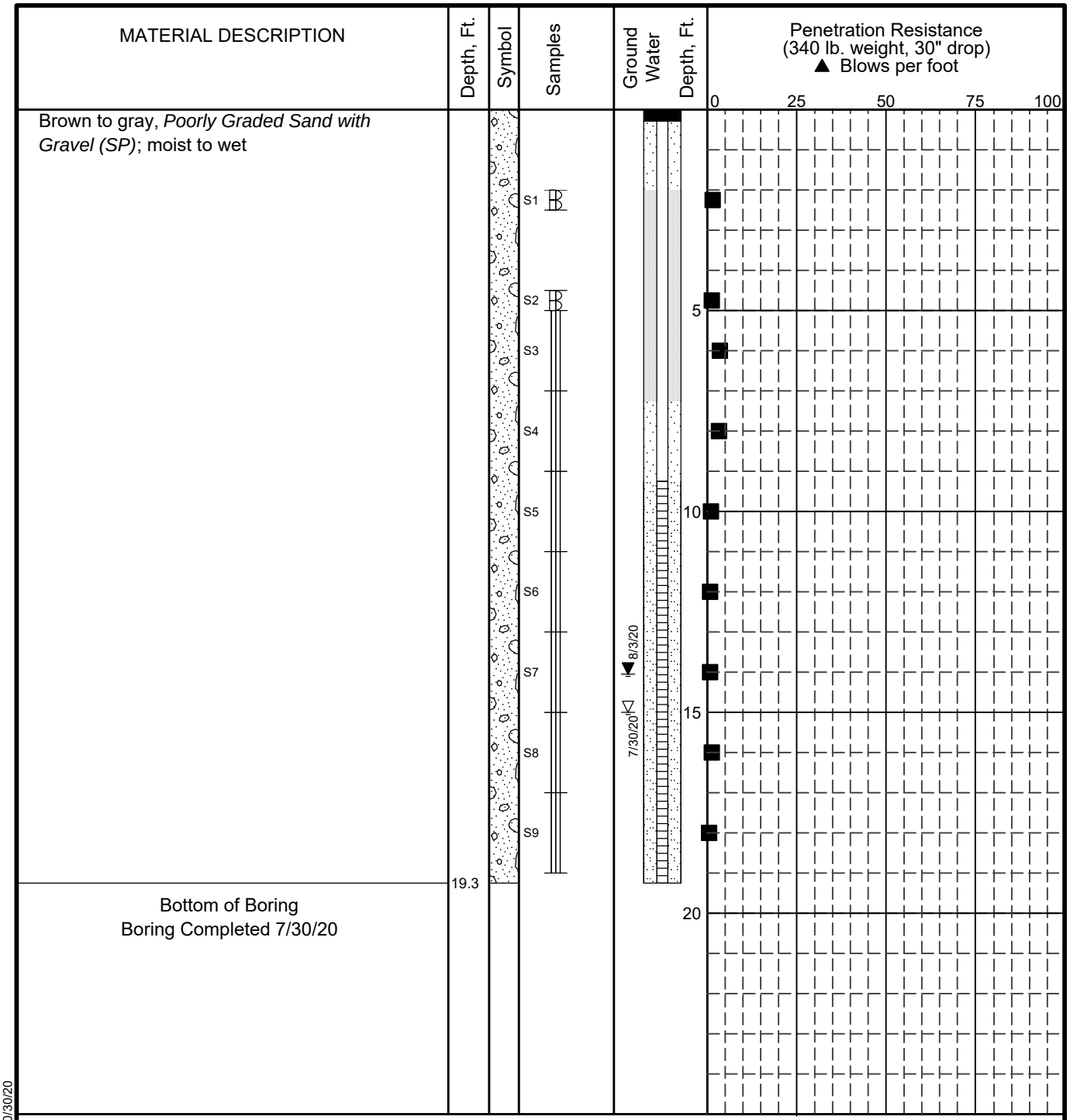
FIG. C-1

ENVIRONMENTAL LOG BORING LOGS.GPJ S&W GEO1.GDT 10/30/20

REV 3 - Approved for Submittal



LEGEND

* Sample not recovered
3" O.D. Split Spoon Sample
Grab Sample

Ground Water Level At Time Of Drilling
Static Water Level
Solid Casing, Sand Pack
Solid Casing and Annular Seal
Slotted Section, Filter Sand
Solid Casing, Cuttings Backfill

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
3. Water level, if indicated above, is for the date specified and may vary.
4. USC letter symbol based on visual classification.

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LOG OF BORING B2

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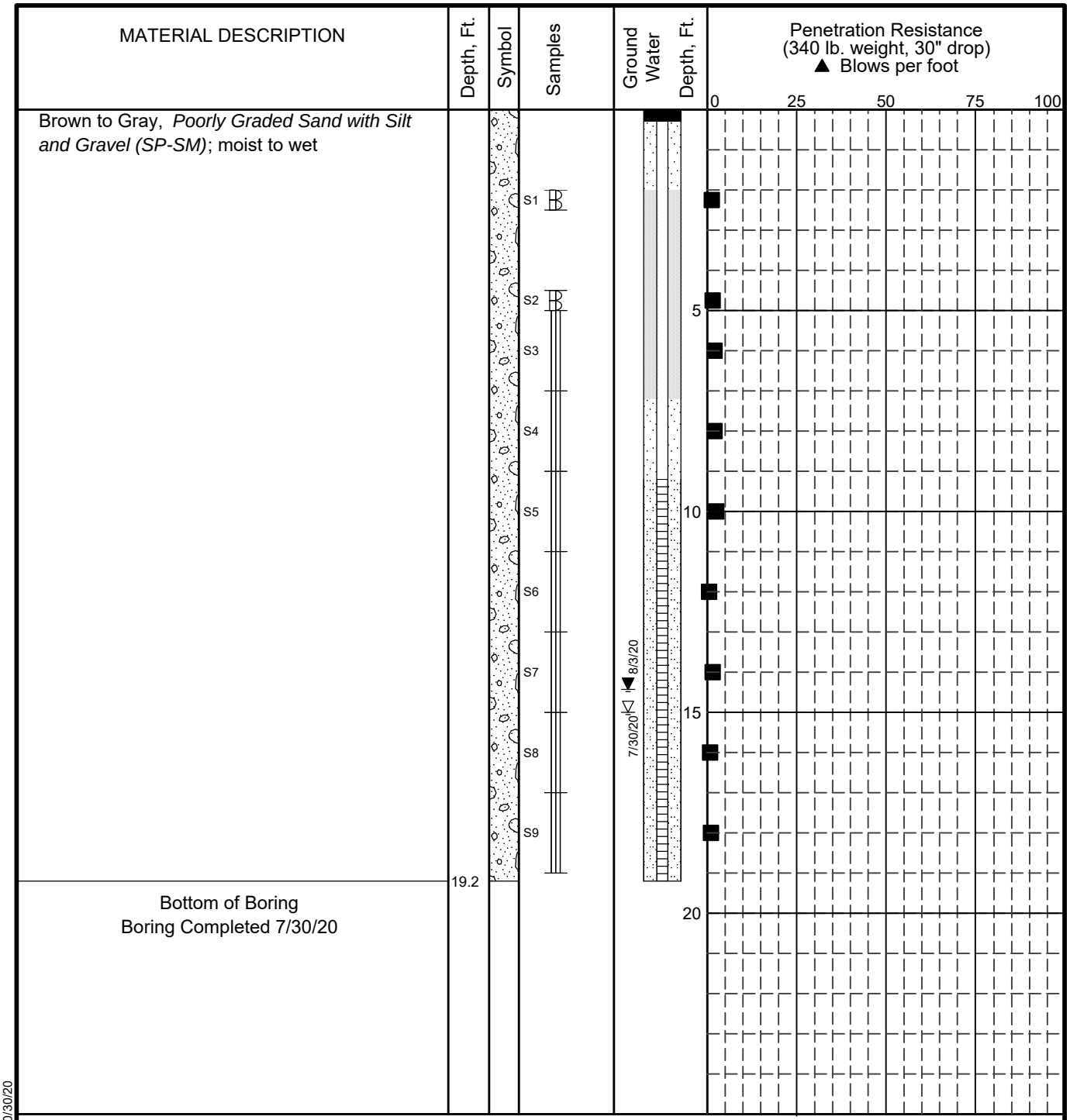
FIG. C-2

ENVIRONMENTAL LOG BORING LOGS.GPJ S&W GEO1.GDT 10/30/20

REV 3 - Approved for Submittal



LEGEND

* Sample not recovered
3" O.D. Split Spoon Sample
Grab Sample
Ground Water Level At Time Of Drilling
Static Water Level
Solid Casing, Sand Pack
Solid Casing and Annular Seal
Slotted Section, Filter Sand
Solid Casing, Cuttings Backfill

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of subsurface materials.
3. Water level, if indicated above, is for the date specified and may vary.
4. USC letter symbol based on visual classification.

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LOG OF BORING B3

October 2020 103880-011

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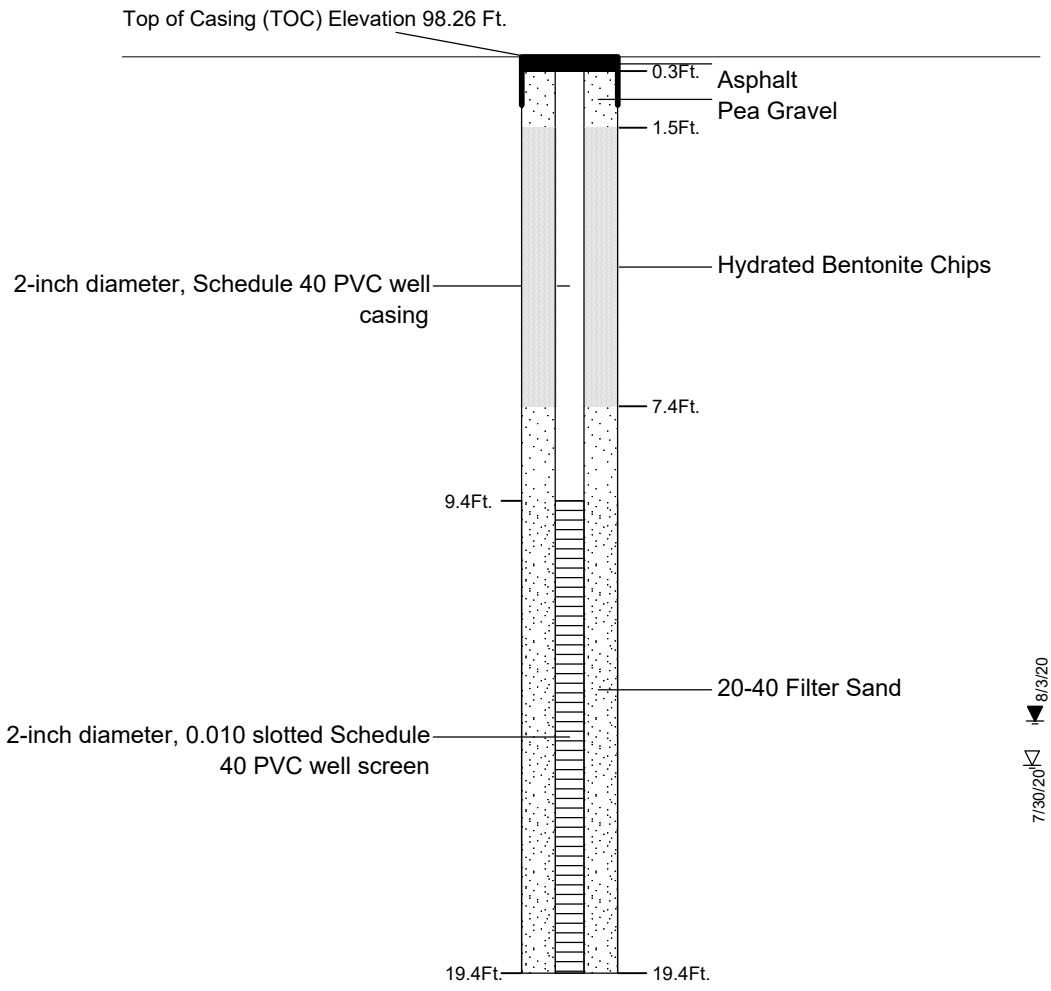
FIG. C-3

ENVIRONMENTAL LOG BORING LOGS.GPJ S&W GEO1.GDT 10/30/20

REV 3 - Approved for Submittal

Casing Description **Backfill Description**



LEGEND

▽ Groundwater Level ATD

▼ Static Groundwater Level

NOTE: All joints use threaded connections.

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Anchorage, Alaska

MONITORING WELL MW1
CONSTRUCTION DETAIL

October 2020 103880-011

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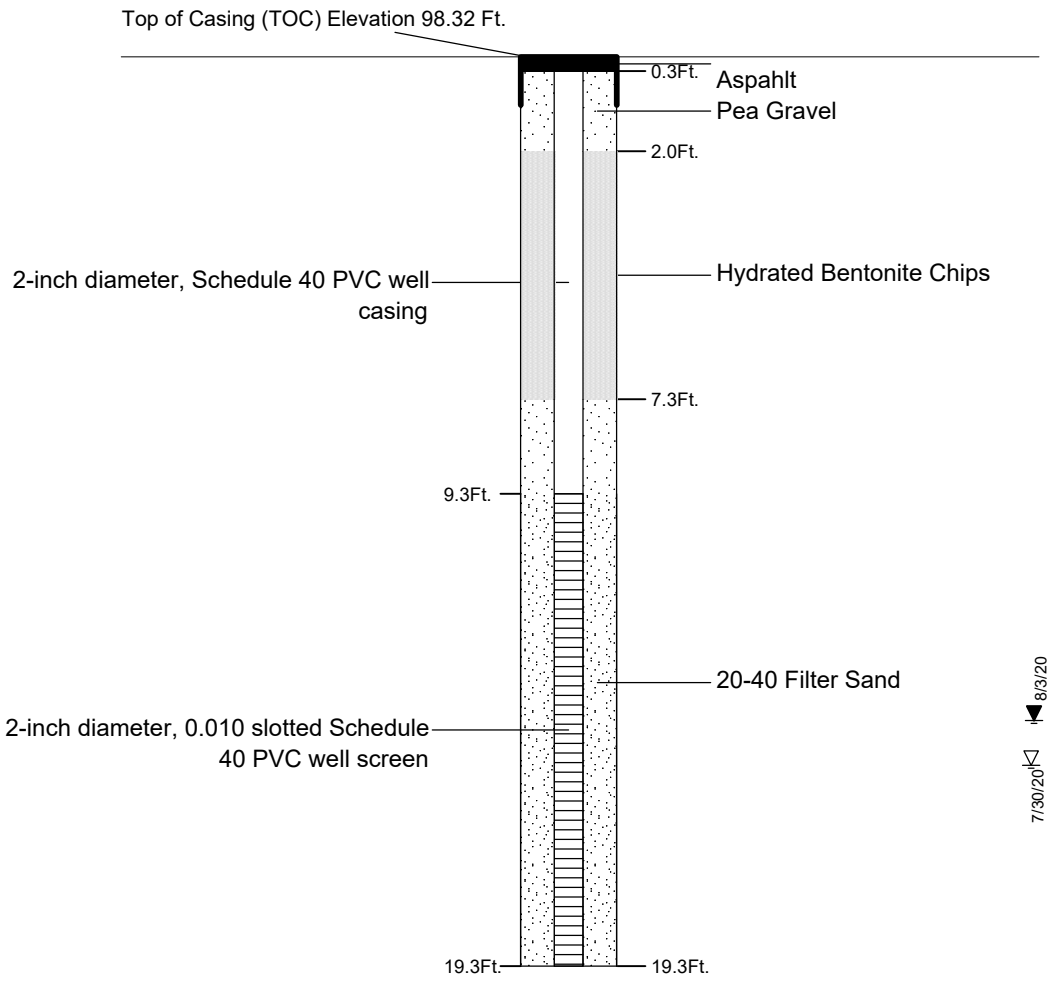
Fig. C-4

Casing Description **Backfill Description**



LEGEND

▽ Groundwater Level ATD

▼ Static Groundwater Level

NOTE: All joints use threaded connections.

1530 Huffman Road
Anchorage, Alaska

MONITORING WELL MW2
CONSTRUCTION DETAIL

October 2020 103880-011

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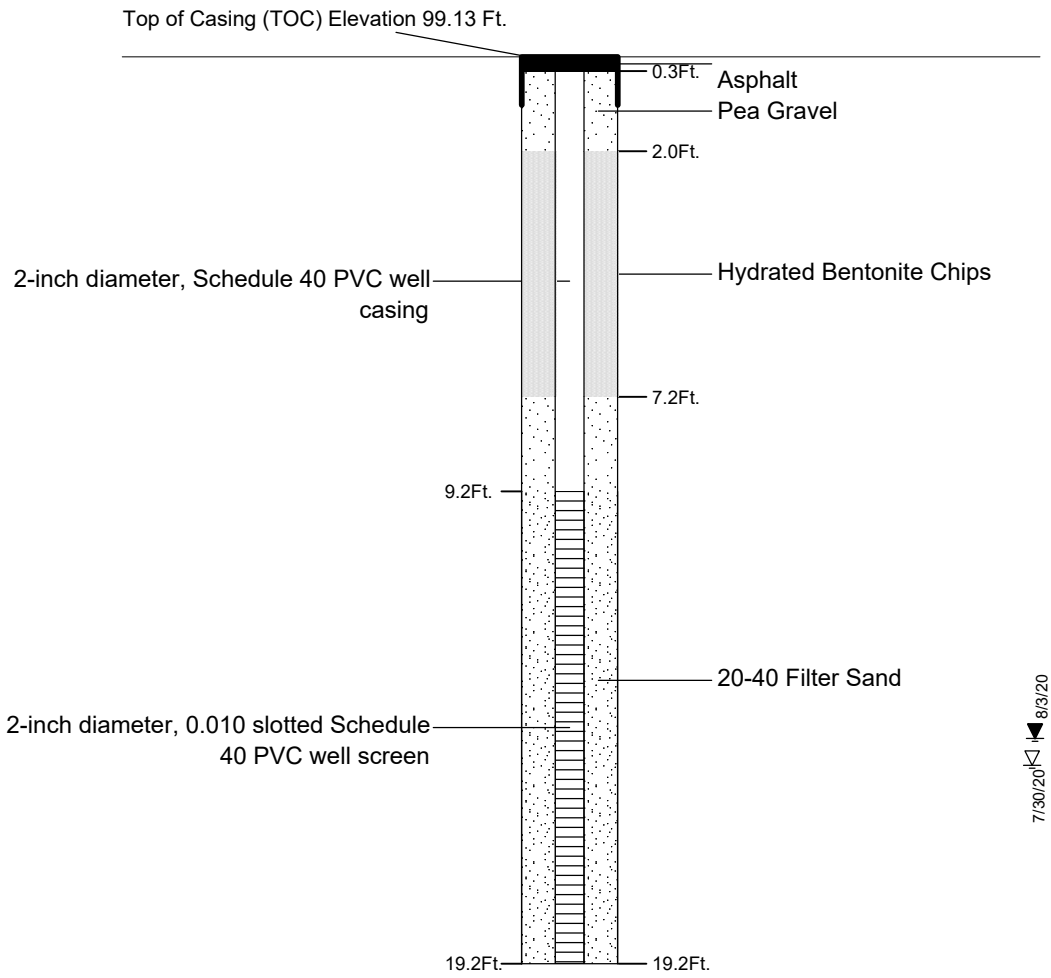
Fig. C-5

Casing Description **Backfill Description**



LEGEND

▽ Groundwater Level ATD

▼ Static Groundwater Level

NOTE: All joints use threaded connections.

1530 Huffman Road
Anchorage, Alaska

MONITORING WELL MW3
CONSTRUCTION DETAIL

October 2020 103880-011

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Fig. C-6

APPENDIX D

DISPOSAL RECEIPTS

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites and Prevention Preparedness and Response Programs

Contaminated Media Transport and Treatment or Disposal Approval Form

DEC HAZARD/SPILL ID #	NAME OF CONTAMINATED SITE OR SPILL	
27225	Holiday Station Store #611 Dispensers	
CONTAMINATED SITE OR SPILL LOCATION – ADDRESS OR OTHER APPROPRIATE DESCRIPTION		
1530 Huffman Road, Anchorage, Alaska		
CURRENT PHYSICAL LOCATION OF MEDIA	**SOURCE OF THE CONTAMINATION (DAY TANK, WASH BAY, FIRE TRAINING PIT, LUST, ETC.)**	
1530 Huffman Road, Anchorage, Alaska	Gasoline and Diesel Fuel Dispensers	
CONTAMINANTS OF CONCERN	**ESTIMATED VOLUME**	**DATE(S) GENERATED**
GRO, DRO, VOCs, PAHs (No CUL Exceedences)	5, 55-gallon drums (3 soil, 2 water)	July & August 2020
POST TREATMENT ANALYSIS REQUIRED *(such as GRO, DRO, RRO, VOCs, metals, PFAS, and/or Chlorinated Solvents)*		
NA		
COMMENTS OR OTHER IMPORTANT INFORMATION		
Contaminated soil will be consolidated at NRC Alaska Anchorage facility, then manifested to Columbia Ridge Landfill, an EPA approved subtitle D landfill located in Arlington, OR. for final disposal. Water will be processed in a wastewater treatment unit at the NRC Alaska facility (2020 Viking Drive, Anchorage, AK 99501).		

TREATMENT FACILITY, LANDFILL, AND/OR FINAL DESTINATION OF MEDIA	PHYSICAL ADDRESS/PHONE NUMBER
NRC Alaska LLC a US Ecology Company	2020 Viking Drive, Anchorage, Alaska 99501 (907) 258-1558
RESPONSIBLE PARTY	**ADDRESS/PHONE NUMBER**
Holiday Alaska, LLC	4567 American Boulevard West, Bloomington, Minnesota, 55437
WASTE MANAGEMENT CO. / ORGANIZER	**ADDRESS/PHONE NUMBER**
NRC Alaska LLC a US Ecology Company	2020 Viking Drive, Anchorage, Alaska 99501 (907) 258-1558

***Note, disposal of polluted soil in a landfill requires prior approval from the landfill operator and ADEC Solid Waste Program.**

Alec Rizzo
Name of the Person Requesting Approval (printed)

Geologist/ Shannon & Wilson
Title/Association

Alec Rizzo Digitally signed by Alec Rizzo Date: 2020.10.01 14:47:45 -08'00'
Signature

10/1/2020
Date

907-561-2120
Phone Number

----------DEC USE ONLY----------

Based on the information provided, ADEC approves transport of the above mentioned material. The Responsible Party or their consultant must submit to the DEC Project Manager a copy of weight receipts of the loads transported and a post treatment analytical report, if disposed of at an approved treatment facility. The contaminated soil shall be transported as a covered load in compliance with 18 AAC 60.015.

Grant Lidren
DEC Project Manager Name (printed)

EPS IV
Project Manager Title

Grant Lidren
Signature

10/5/2020
Date

269-8685
Phone Number

*** IN CASE OF EMERGENCY CALL 800-899-4672 ***

157789MK

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: EXEMPT

Manifest Document No.: 157789A

2. Page 1 of 1

3. Generator's Name and Mailing Address
HOLIDAY COMPANY
PO BOX 1224
MINNEAPOLIS, MN 55440

HOLIDAY STATION # 611
1530 HUFFMAN ROAD
ANCHORAGE, AK 99515

4. Generator's Phone (907) 351-4385

86

5. Transporter 1 Company Name: NRC ALASKA LLC

6. US EPA ID Number: AKR000004184

A. State Transporter's ID

B. Transporter 1 Phone: 907-258-1558

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
NRC ALASKA LLC
2020 VIKING DRIVE
ANCHORAGE, AK 99501

10. US EPA ID Number: AKR000004184

E. State Facility's ID

F. Facility's Phone: 907-258-1558

HM	11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.	MATERIAL NOT REGULATED BY D.O.T.	2	DM	750	P
b.	MATERIAL NOT REGULATED BY D.O.T.	3	DM	3000	P
c.					
d.					

G. Additional Descriptions for Materials Listed Above
1) EA0302 IDW DECON WATER / GROUNDWATER
2) EA0707 IDW BORE CUTTINGS

H. Handling Codes for Wastes Listed Above
D83108

15. Special Handling Instructions and Additional Information
Shipper's Certification: This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date: Month	Day	Year
K. Alec Rizzo	K Rizzo	10	19	2020

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date: Month	Day	Year
Roy C Trisdale Jr	Roy C Trisdale Jr	10	19	2020

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date: Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date: Month	Day	Year

NON-HAZARDOUS WASTE

APPENDIX E

RESULTS OF ANALYTICAL TESTING BY SGS NORTH AMERICA INC.

AND

ADEC LABORATORY DATA REVIEW CHECKLISTS

Laboratory Report of Analysis

To: Shannon & Wilson, Inc.
5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907)433-3223

Report Number: **1203813**

Client Project: **103880 Holiday Statn Store#611**

Dear Dan McMahon,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

_____

Justin Nelson Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **Shannon & Wilson, Inc.**
SGS Project: **1203813**
Project Name/Site: **103880 Holiday Statn Store#611**
Project Contact: **Dan McMahon**

Refer to sample receipt form for information on sample condition.

LCS for HBN 1810127 [XXX/43618 (1573965) LCS

AK102 - Surrogate recovery in the LCS/LCSD for 5a androstane does not meet QC criteria; however, the surrogate recoveries in the samples are within criteria.

LCS for HBN 1810506 [VXX/36149 (1575630) LCS

AK101 -LCS recovery for GRO does not meet QC criteria. This analyte is not detected above the LOQ in the associated samples.

LCSD for HBN 1810127 [XXX/4361 (1573966) LCSD

AK102 - Surrogate recovery in the LCS/LCSD for 5a androstane does not meet QC criteria; however, the surrogate recoveries in the samples are within criteria.

LCSD for HBN 1810506 [VXX/3614 (1575631) LCSD

AK101 -LCSD recovery for GRO does not meet QC criteria. This analyte is not detected above the LOQ in the associated samples.

MB for HBN 1809861 [VXX/36051] (1572901) MB

8260D - Methylene chloride was detected in the method blank above 1/2 the LOQ but less than the LOQ.

1203816004(1573033MS) (1572903) MS

8260D - MS recovery for trichlorofluoromethane does not meet QC criteria. Refer to LCS for accuracy requirements.

1203816004(1573033MSD) (1572904) MSD

8260D - MS/MSD RPD for trichlorofluoromethane does not meet QC criteria. This analyte was not detected above the LOQ in the parent sample.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

SGS North America Inc. 200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
103880-B1S4	1203813001	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-B1S6	1203813002	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-B2S3	1203813003	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-B2S7	1203813004	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-B3S5	1203813005	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-B3S7	1203813006	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-B3S17	1203813007	07/30/2020	07/31/2020	Soil/Solid (dry weight)
103880-STB	1203813008	07/30/2020	07/31/2020	Soil/Solid (dry weight)

Method	Method Description
8270D SIM (PAH)	8270 PAH SIM Semi-Volatiles GC/MS
AK101	AK101/8021 Combo. (S)
SW8021B	AK101/8021 Combo. (S)
AK102	Diesel Range Organics (S)
AK101	Gasoline Range Organics (S)
SM21 2540G	Percent Solids SM2540G
SW8260D	VOC 8260 (S) Field Extracted

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
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Detectable Results Summary

Client Sample ID: **103880-B1S4**
Lab Sample ID: 1203813001

	Parameter	Result	Units
Polynuclear Aromatics GC/MS	Benzo[a]pyrene	9.32J	ug/Kg
	Benzo[g,h,i]perylene	11.8J	ug/Kg
	Chrysene	7.43J	ug/Kg
Semivolatile Organic Fuels	Diesel Range Organics	12.4J	mg/Kg

Client Sample ID: **103880-B1S6**
Lab Sample ID: 1203813002

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	7.59J	mg/Kg

Client Sample ID: **103880-B2S3**
Lab Sample ID: 1203813003

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	7.86J	mg/Kg
Volatile Fuels	Gasoline Range Organics	0.944J	mg/Kg
Volatile GC/MS	Toluene	27.8	ug/Kg

Client Sample ID: **103880-B3S5**
Lab Sample ID: 1203813005

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	18.4J	mg/Kg
Volatile Fuels	o-Xylene	8.57J	ug/Kg
	P & M -Xylene	26.6J	ug/Kg
	Toluene	20.2J	ug/Kg
	Xylenes (total)	35.2J	ug/Kg

Client Sample ID: **103880-B3S7**
Lab Sample ID: 1203813006

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	7.71J	mg/Kg
Volatile Fuels	Gasoline Range Organics	1.24J	mg/Kg
Volatile GC/MS	Tetrachloroethene	53.4	ug/Kg

Client Sample ID: **103880-B3S17**
Lab Sample ID: 1203813007

	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	10.4J	mg/Kg
Volatile Fuels	Gasoline Range Organics	0.994J	mg/Kg
Volatile GC/MS	Tetrachloroethene	48.8	ug/Kg
	Toluene	10.8J	ug/Kg

SGS North America Inc.
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Results of **103880-B1S4**

Client Sample ID: **103880-B1S4**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813001
Lab Project ID: 1203813

Collection Date: 07/30/20 11:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):87.4
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
2-Methylnaphthalene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Acenaphthene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Acenaphthylene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Anthracene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Benzo(a)Anthracene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Benzo[a]pyrene	9.32	J	28.5	7.12	ug/Kg	1		08/21/20 12:54
Benzo[b]Fluoranthene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Benzo[g,h,i]perylene	11.8	J	28.5	7.12	ug/Kg	1		08/21/20 12:54
Benzo[k]fluoranthene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Chrysene	7.43	J	28.5	7.12	ug/Kg	1		08/21/20 12:54
Dibenzo[a,h]anthracene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Fluoranthene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Fluorene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Indeno[1,2,3-c,d] pyrene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Naphthalene	11.4	U	22.8	5.70	ug/Kg	1		08/21/20 12:54
Phenanthrene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Pyrene	14.3	U	28.5	7.12	ug/Kg	1		08/21/20 12:54
Surrogates								
2-Methylnaphthalene-d10 (surr)	69.8		58-103		%	1		08/21/20 12:54
Fluoranthene-d10 (surr)	70.3		54-113		%	1		08/21/20 12:54

Batch Information

Analytical Batch: XMS12211
Analytical Method: 8270D SIM (PAH)
Analyst: DSD
Analytical Date/Time: 08/21/20 12:54
Container ID: 1203813001-A

Prep Batch: XXX43624
Prep Method: SW3550C
Prep Date/Time: 08/12/20 09:48
Prep Initial Wt./Vol.: 22.59 g
Prep Extract Vol: 5 mL

Results of **103880-B1S4**

Client Sample ID: **103880-B1S4**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813001
Lab Project ID: 1203813

Collection Date: 07/30/20 11:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):87.4
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	12.4	J	22.8	7.06	mg/Kg	1		08/19/20 01:44
Surrogates								
5a Androstane (surr)	94.4		50-150		%	1		08/19/20 01:44

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 01:44
Container ID: 1203813001-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.135 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B1S4**

Client Sample ID: **103880-B1S4**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813001
Lab Project ID: 1203813

Collection Date: 07/30/20 11:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):87.4
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.55	U	3.11	0.934	mg/Kg	1		08/07/20 03:57
Surrogates								
4-Bromofluorobenzene (surr)	118		50-150		%	1		08/07/20 03:57

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 03:57
Container ID: 1203813001-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 11:00
Prep Initial Wt./Vol.: 59.82 g
Prep Extract Vol: 32.5527 mL

Results of **103880-B1S4**

Client Sample ID: **103880-B1S4**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813001
Lab Project ID: 1203813

Collection Date: 07/30/20 11:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):87.4
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	12.4	U	24.9	7.72	ug/Kg	1		08/04/20 15:10
1,1,1-Trichloroethane	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,1,2,2-Tetrachloroethane	1.25	U	2.49	0.772	ug/Kg	1		08/04/20 15:10
1,1,2-Trichloroethane	0.498	U	0.996	0.311	ug/Kg	1		08/04/20 15:10
1,1-Dichloroethane	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,1-Dichloroethene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,1-Dichloropropene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,2,3-Trichlorobenzene	31.1	U	62.3	18.7	ug/Kg	1		08/04/20 15:10
1,2,3-Trichloropropane	1.25	U	2.49	0.772	ug/Kg	1		08/04/20 15:10
1,2,4-Trichlorobenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,2,4-Trimethylbenzene	31.1	U	62.3	18.7	ug/Kg	1		08/04/20 15:10
1,2-Dibromo-3-chloropropane	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
1,2-Dibromoethane	0.625	U	1.25	0.498	ug/Kg	1		08/04/20 15:10
1,2-Dichlorobenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,2-Dichloroethane	1.25	U	2.49	0.872	ug/Kg	1		08/04/20 15:10
1,2-Dichloropropane	6.25	U	12.5	3.86	ug/Kg	1		08/04/20 15:10
1,3,5-Trimethylbenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,3-Dichlorobenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
1,3-Dichloropropane	6.25	U	12.5	3.86	ug/Kg	1		08/04/20 15:10
1,4-Dichlorobenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
2,2-Dichloropropane	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
2-Butanone (MEK)	156	U	311	97.2	ug/Kg	1		08/04/20 15:10
2-Chlorotoluene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
2-Hexanone	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
4-Chlorotoluene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
4-Isopropyltoluene	62.5	U	125	31.1	ug/Kg	1		08/04/20 15:10
4-Methyl-2-pentanone (MIBK)	156	U	311	97.2	ug/Kg	1		08/04/20 15:10
Acetone	156	U	311	97.2	ug/Kg	1		08/04/20 15:10
Benzene	7.80	U	15.6	4.86	ug/Kg	1		08/04/20 15:10
Bromobenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Bromochloromethane	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Bromodichloromethane	1.25	U	2.49	0.772	ug/Kg	1		08/04/20 15:10
Bromoform	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Bromomethane	12.4	U	24.9	7.72	ug/Kg	1		08/04/20 15:10
Carbon disulfide	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
Carbon tetrachloride	7.80	U	15.6	4.86	ug/Kg	1		08/04/20 15:10
Chlorobenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B1S4**

Client Sample ID: **103880-B1S4**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813001
Lab Project ID: 1203813

Collection Date: 07/30/20 11:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):87.4
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	125	U	249	77.2	ug/Kg	1		08/04/20 15:10
Chloroform	2.49	U	4.98	1.25	ug/Kg	1		08/04/20 15:10
Chloromethane	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
cis-1,2-Dichloroethene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
cis-1,3-Dichloropropene	7.80	U	15.6	4.86	ug/Kg	1		08/04/20 15:10
Dibromochloromethane	3.12	U	6.23	1.87	ug/Kg	1		08/04/20 15:10
Dibromomethane	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Dichlorodifluoromethane	31.1	U	62.3	18.7	ug/Kg	1		08/04/20 15:10
Ethylbenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Freon-113	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
Hexachlorobutadiene	12.4	U	24.9	7.72	ug/Kg	1		08/04/20 15:10
Isopropylbenzene (Cumene)	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Methylene chloride	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
Methyl-t-butyl ether	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
Naphthalene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
n-Butylbenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
n-Propylbenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
o-Xylene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
P & M -Xylene	31.1	U	62.3	18.7	ug/Kg	1		08/04/20 15:10
sec-Butylbenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Styrene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
tert-Butylbenzene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
Tetrachloroethene	7.80	U	15.6	4.86	ug/Kg	1		08/04/20 15:10
Toluene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
trans-1,2-Dichloroethene	15.6	U	31.1	9.72	ug/Kg	1		08/04/20 15:10
trans-1,3-Dichloropropene	7.80	U	15.6	4.86	ug/Kg	1		08/04/20 15:10
Trichloroethene	3.12	U	6.23	1.87	ug/Kg	1		08/04/20 15:10
Trichlorofluoromethane	31.1	U	62.3	18.7	ug/Kg	1		08/04/20 15:10
Vinyl acetate	62.5	U	125	38.6	ug/Kg	1		08/04/20 15:10
Vinyl chloride	0.498	U	0.996	0.311	ug/Kg	1		08/04/20 15:10
Xylenes (total)	46.7	U	93.4	28.4	ug/Kg	1		08/04/20 15:10
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		71-136		%	1		08/04/20 15:10
4-Bromofluorobenzene (surr)	93.6		55-151		%	1		08/04/20 15:10
Toluene-d8 (surr)	99.6		85-116		%	1		08/04/20 15:10

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B1S4**

Client Sample ID: **103880-B1S4**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813001
Lab Project ID: 1203813

Collection Date: 07/30/20 11:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):87.4
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Analyst: KAJ
Analytical Date/Time: 08/04/20 15:10
Container ID: 1203813001-B

Prep Batch: VXX36051
Prep Method: SW5035A
Prep Date/Time: 07/30/20 11:00
Prep Initial Wt./Vol.: 59.82 g
Prep Extract Vol: 32.5527 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B1S6**

Client Sample ID: **103880-B1S6**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813002
Lab Project ID: 1203813

Collection Date: 07/30/20 11:25
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.6
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	7.59	J	22.0	6.83	mg/Kg	1		08/19/20 01:54
Surrogates								
5a Androstane (surr)	104		50-150		%	1		08/19/20 01:54

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 01:54
Container ID: 1203813002-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.065 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B1S6**

Client Sample ID: **103880-B1S6**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813002
Lab Project ID: 1203813

Collection Date: 07/30/20 11:25
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.6
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.43	U	2.86	0.857	mg/Kg	1		08/07/20 02:46
Surrogates								
4-Bromofluorobenzene (surr)	131		50-150		%	1		08/07/20 02:46

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 02:46
Container ID: 1203813002-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 11:25
Prep Initial Wt./Vol.: 59.134 g
Prep Extract Vol: 30.5865 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzene	7.15	U	14.3	4.57	ug/Kg	1		08/07/20 02:46
Ethylbenzene	14.3	U	28.6	8.91	ug/Kg	1		08/07/20 02:46
o-Xylene	14.3	U	28.6	8.91	ug/Kg	1		08/07/20 02:46
P & M -Xylene	28.6	U	57.1	17.1	ug/Kg	1		08/07/20 02:46
Toluene	14.3	U	28.6	8.91	ug/Kg	1		08/07/20 02:46
Xylenes (total)	42.9	U	85.7	26.0	ug/Kg	1		08/07/20 02:46
Surrogates								
1,4-Difluorobenzene (surr)	94		72-119		%	1		08/07/20 02:46

Batch Information

Analytical Batch: VFC15270
Analytical Method: SW8021B
Analyst: ALJ
Analytical Date/Time: 08/07/20 02:46
Container ID: 1203813002-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 11:25
Prep Initial Wt./Vol.: 59.134 g
Prep Extract Vol: 30.5865 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B2S3**

Client Sample ID: **103880-B2S3**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813003
Lab Project ID: 1203813

Collection Date: 07/30/20 15:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):97.1
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
2-Methylnaphthalene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Acenaphthene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Acenaphthylene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Anthracene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Benzo(a)Anthracene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Benzo[a]pyrene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Benzo[b]Fluoranthene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Benzo[g,h,i]perylene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Benzo[k]fluoranthene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Chrysene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Dibenzo[a,h]anthracene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Fluoranthene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Fluorene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Indeno[1,2,3-c,d] pyrene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Naphthalene	10.3	U	20.5	5.12	ug/Kg	1		08/21/20 13:14
Phenanthrene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Pyrene	12.8	U	25.6	6.40	ug/Kg	1		08/21/20 13:14
Surrogates								
2-Methylnaphthalene-d10 (surr)	71.9		58-103		%	1		08/21/20 13:14
Fluoranthene-d10 (surr)	76.9		54-113		%	1		08/21/20 13:14

Batch Information

Analytical Batch: XMS12211
Analytical Method: 8270D SIM (PAH)
Analyst: DSD
Analytical Date/Time: 08/21/20 13:14
Container ID: 1203813003-A

Prep Batch: XXX43624
Prep Method: SW3550C
Prep Date/Time: 08/12/20 09:48
Prep Initial Wt./Vol.: 22.638 g
Prep Extract Vol: 5 mL

Results of **103880-B2S3**

Client Sample ID: **103880-B2S3**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813003
Lab Project ID: 1203813

Collection Date: 07/30/20 15:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):97.1
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	7.86	J	20.5	6.36	mg/Kg	1		08/19/20 02:04
Surrogates								
5a Androstane (surr)	102		50-150		%	1		08/19/20 02:04

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 02:04
Container ID: 1203813003-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.112 g
Prep Extract Vol: 5 mL

Results of **103880-B2S3**

Client Sample ID: **103880-B2S3**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813003
Lab Project ID: 1203813

Collection Date: 07/30/20 15:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):97.1
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.944	J	2.76	0.827	mg/Kg	1		08/07/20 03:40
Surrogates								
4-Bromofluorobenzene (surr)	95.8		50-150		%	1		08/07/20 03:40

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 03:40
Container ID: 1203813003-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 15:20
Prep Initial Wt./Vol.: 49.465 g
Prep Extract Vol: 26.4551 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B2S3**

Client Sample ID: **103880-B2S3**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813003
Lab Project ID: 1203813

Collection Date: 07/30/20 15:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):97.1
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	11.0	U	22.0	6.83	ug/Kg	1		08/04/20 15:26
1,1,1-Trichloroethane	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,1,2,2-Tetrachloroethane	1.10	U	2.20	0.683	ug/Kg	1		08/04/20 15:26
1,1,2-Trichloroethane	0.441	U	0.882	0.276	ug/Kg	1		08/04/20 15:26
1,1-Dichloroethane	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,1-Dichloroethene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,1-Dichloropropene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,2,3-Trichlorobenzene	27.6	U	55.1	16.5	ug/Kg	1		08/04/20 15:26
1,2,3-Trichloropropane	1.10	U	2.20	0.683	ug/Kg	1		08/04/20 15:26
1,2,4-Trichlorobenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,2,4-Trimethylbenzene	27.6	U	55.1	16.5	ug/Kg	1		08/04/20 15:26
1,2-Dibromo-3-chloropropane	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
1,2-Dibromoethane	0.550	U	1.10	0.441	ug/Kg	1		08/04/20 15:26
1,2-Dichlorobenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,2-Dichloroethane	1.10	U	2.20	0.771	ug/Kg	1		08/04/20 15:26
1,2-Dichloropropane	5.50	U	11.0	3.42	ug/Kg	1		08/04/20 15:26
1,3,5-Trimethylbenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,3-Dichlorobenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
1,3-Dichloropropane	5.50	U	11.0	3.42	ug/Kg	1		08/04/20 15:26
1,4-Dichlorobenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
2,2-Dichloropropane	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
2-Butanone (MEK)	138	U	276	86.0	ug/Kg	1		08/04/20 15:26
2-Chlorotoluene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
2-Hexanone	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
4-Chlorotoluene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
4-Isopropyltoluene	55.0	U	110	27.6	ug/Kg	1		08/04/20 15:26
4-Methyl-2-pentanone (MIBK)	138	U	276	86.0	ug/Kg	1		08/04/20 15:26
Acetone	138	U	276	86.0	ug/Kg	1		08/04/20 15:26
Benzene	6.90	U	13.8	4.30	ug/Kg	1		08/04/20 15:26
Bromobenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Bromochloromethane	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Bromodichloromethane	1.10	U	2.20	0.683	ug/Kg	1		08/04/20 15:26
Bromoform	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Bromomethane	11.0	U	22.0	6.83	ug/Kg	1		08/04/20 15:26
Carbon disulfide	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
Carbon tetrachloride	6.90	U	13.8	4.30	ug/Kg	1		08/04/20 15:26
Chlorobenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26

Results of **103880-B2S3**

Client Sample ID: **103880-B2S3**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813003
Lab Project ID: 1203813

Collection Date: 07/30/20 15:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):97.1
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	110	U	220	68.3	ug/Kg	1		08/04/20 15:26
Chloroform	2.21	U	4.41	1.10	ug/Kg	1		08/04/20 15:26
Chloromethane	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
cis-1,2-Dichloroethene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
cis-1,3-Dichloropropene	6.90	U	13.8	4.30	ug/Kg	1		08/04/20 15:26
Dibromochloromethane	2.75	U	5.51	1.65	ug/Kg	1		08/04/20 15:26
Dibromomethane	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Dichlorodifluoromethane	27.6	U	55.1	16.5	ug/Kg	1		08/04/20 15:26
Ethylbenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Freon-113	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
Hexachlorobutadiene	11.0	U	22.0	6.83	ug/Kg	1		08/04/20 15:26
Isopropylbenzene (Cumene)	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Methylene chloride	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
Methyl-t-butyl ether	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
Naphthalene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
n-Butylbenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
n-Propylbenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
o-Xylene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
P & M -Xylene	27.6	U	55.1	16.5	ug/Kg	1		08/04/20 15:26
sec-Butylbenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Styrene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
tert-Butylbenzene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
Tetrachloroethene	6.90	U	13.8	4.30	ug/Kg	1		08/04/20 15:26
Toluene	27.8		27.6	8.60	ug/Kg	1		08/04/20 15:26
trans-1,2-Dichloroethene	13.8	U	27.6	8.60	ug/Kg	1		08/04/20 15:26
trans-1,3-Dichloropropene	6.90	U	13.8	4.30	ug/Kg	1		08/04/20 15:26
Trichloroethene	2.75	U	5.51	1.65	ug/Kg	1		08/04/20 15:26
Trichlorofluoromethane	27.6	U	55.1	16.5	ug/Kg	1		08/04/20 15:26
Vinyl acetate	55.0	U	110	34.2	ug/Kg	1		08/04/20 15:26
Vinyl chloride	0.441	U	0.882	0.276	ug/Kg	1		08/04/20 15:26
Xylenes (total)	41.4	U	82.7	25.1	ug/Kg	1		08/04/20 15:26
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		71-136		%	1		08/04/20 15:26
4-Bromofluorobenzene (surr)	74		55-151		%	1		08/04/20 15:26
Toluene-d8 (surr)	99.8		85-116		%	1		08/04/20 15:26

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B2S3**

Client Sample ID: **103880-B2S3**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813003
Lab Project ID: 1203813

Collection Date: 07/30/20 15:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):97.1
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Analyst: KAJ
Analytical Date/Time: 08/04/20 15:26
Container ID: 1203813003-B

Prep Batch: VXX36051
Prep Method: SW5035A
Prep Date/Time: 07/30/20 15:20
Prep Initial Wt./Vol.: 49.465 g
Prep Extract Vol: 26.4551 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B2S7**

Client Sample ID: **103880-B2S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813004
Lab Project ID: 1203813

Collection Date: 07/30/20 16:15
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):94.7
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	10.5	U	21.0	6.51	mg/Kg	1		08/19/20 02:14
Surrogates								
5a Androstane (surr)	103		50-150		%	1		08/19/20 02:14

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 02:14
Container ID: 1203813004-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.164 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B2S7**

Client Sample ID: **103880-B2S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813004
Lab Project ID: 1203813

Collection Date: 07/30/20 16:15
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):94.7
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.910	U	1.82	0.547	mg/Kg	1		08/07/20 03:04
Surrogates								
4-Bromofluorobenzene (surr)	137		50-150		%	1		08/07/20 03:04

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 03:04
Container ID: 1203813004-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 16:15
Prep Initial Wt./Vol.: 85.524 g
Prep Extract Vol: 29.5442 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzene	4.56	U	9.12	2.92	ug/Kg	1		08/07/20 03:04
Ethylbenzene	9.10	U	18.2	5.69	ug/Kg	1		08/07/20 03:04
o-Xylene	9.10	U	18.2	5.69	ug/Kg	1		08/07/20 03:04
P & M -Xylene	18.3	U	36.5	10.9	ug/Kg	1		08/07/20 03:04
Toluene	9.10	U	18.2	5.69	ug/Kg	1		08/07/20 03:04
Xylenes (total)	27.4	U	54.7	16.6	ug/Kg	1		08/07/20 03:04
Surrogates								
1,4-Difluorobenzene (surr)	93.1		72-119		%	1		08/07/20 03:04

Batch Information

Analytical Batch: VFC15270
Analytical Method: SW8021B
Analyst: ALJ
Analytical Date/Time: 08/07/20 03:04
Container ID: 1203813004-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 16:15
Prep Initial Wt./Vol.: 85.524 g
Prep Extract Vol: 29.5442 mL

Results of **103880-B3S5**

Client Sample ID: **103880-B3S5**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813005
Lab Project ID: 1203813

Collection Date: 07/30/20 19:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):95.6
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	18.4	J	20.8	6.46	mg/Kg	1		08/19/20 02:24
Surrogates								
5a Androstane (surr)	106		50-150		%	1		08/19/20 02:24

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 02:24
Container ID: 1203813005-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.099 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S5**

Client Sample ID: **103880-B3S5**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813005
Lab Project ID: 1203813

Collection Date: 07/30/20 19:20
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):95.6
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.10	U	2.20	0.659	mg/Kg	1		08/07/20 03:22
Surrogates								
4-Bromofluorobenzene (surr)	133		50-150		%	1		08/07/20 03:22

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 03:22
Container ID: 1203813005-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 19:20
Prep Initial Wt./Vol.: 66.379 g
Prep Extract Vol: 27.8975 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzene	5.50	U	11.0	3.52	ug/Kg	1		08/07/20 03:22
Ethylbenzene	11.0	U	22.0	6.86	ug/Kg	1		08/07/20 03:22
o-Xylene	8.57	J	22.0	6.86	ug/Kg	1		08/07/20 03:22
P & M -Xylene	26.6	J	43.9	13.2	ug/Kg	1		08/07/20 03:22
Toluene	20.2	J	22.0	6.86	ug/Kg	1		08/07/20 03:22
Xylenes (total)	35.2	J	65.9	20.0	ug/Kg	1		08/07/20 03:22
Surrogates								
1,4-Difluorobenzene (surr)	93.6		72-119		%	1		08/07/20 03:22

Batch Information

Analytical Batch: VFC15270
Analytical Method: SW8021B
Analyst: ALJ
Analytical Date/Time: 08/07/20 03:22
Container ID: 1203813005-B

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 07/30/20 19:20
Prep Initial Wt./Vol.: 66.379 g
Prep Extract Vol: 27.8975 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S7**

Client Sample ID: **103880-B3S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813006
Lab Project ID: 1203813

Collection Date: 07/30/20 19:38
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):91.8
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
2-Methylnaphthalene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Acenaphthene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Acenaphthylene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Anthracene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Benzo(a)Anthracene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Benzo[a]pyrene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Benzo[b]Fluoranthene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Benzo[g,h,i]perylene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Benzo[k]fluoranthene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Chrysene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Dibenzo[a,h]anthracene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Fluoranthene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Fluorene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Indeno[1,2,3-c,d] pyrene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Naphthalene	10.9	U	21.7	5.43	ug/Kg	1		08/21/20 13:35
Phenanthrene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Pyrene	13.6	U	27.1	6.79	ug/Kg	1		08/21/20 13:35
Surrogates								
2-Methylnaphthalene-d10 (surr)	73.7		58-103		%	1		08/21/20 13:35
Fluoranthene-d10 (surr)	74.8		54-113		%	1		08/21/20 13:35

Batch Information

Analytical Batch: XMS12211
Analytical Method: 8270D SIM (PAH)
Analyst: DSD
Analytical Date/Time: 08/21/20 13:35
Container ID: 1203813006-A

Prep Batch: XXX43624
Prep Method: SW3550C
Prep Date/Time: 08/12/20 09:48
Prep Initial Wt./Vol.: 22.569 g
Prep Extract Vol: 5 mL

Results of **103880-B3S7**

Client Sample ID: **103880-B3S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813006
Lab Project ID: 1203813

Collection Date: 07/30/20 19:38
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):91.8
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	7.71	J	21.6	6.70	mg/Kg	1		08/19/20 02:34
Surrogates								
5a Androstane (surr)	105		50-150		%	1		08/19/20 02:34

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 02:34
Container ID: 1203813006-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.213 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S7**

Client Sample ID: **103880-B3S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813006
Lab Project ID: 1203813

Collection Date: 07/30/20 19:38
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):91.8
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.24 J		3.55	1.06	mg/Kg	1		08/18/20 06:56
Surrogates								
4-Bromofluorobenzene (surr)	97.2		50-150		%	1		08/18/20 06:56

Batch Information

Analytical Batch: VFC15289
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/18/20 06:56
Container ID: 1203813006-B

Prep Batch: VXX36154
Prep Method: SW5035A
Prep Date/Time: 07/30/20 19:38
Prep Initial Wt./Vol.: 43.854 g
Prep Extract Vol: 28.5815 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S7**

Client Sample ID: **103880-B3S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813006
Lab Project ID: 1203813

Collection Date: 07/30/20 19:38
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):91.8
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	14.2	U	28.4	8.80	ug/Kg	1		08/04/20 15:41
1,1,1-Trichloroethane	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,1,2,2-Tetrachloroethane	1.42	U	2.84	0.880	ug/Kg	1		08/04/20 15:41
1,1,2-Trichloroethane	0.570	U	1.14	0.355	ug/Kg	1		08/04/20 15:41
1,1-Dichloroethane	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,1-Dichloroethene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,1-Dichloropropene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,2,3-Trichlorobenzene	35.5	U	71.0	21.3	ug/Kg	1		08/04/20 15:41
1,2,3-Trichloropropane	1.42	U	2.84	0.880	ug/Kg	1		08/04/20 15:41
1,2,4-Trichlorobenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,2,4-Trimethylbenzene	35.5	U	71.0	21.3	ug/Kg	1		08/04/20 15:41
1,2-Dibromo-3-chloropropane	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
1,2-Dibromoethane	0.710	U	1.42	0.568	ug/Kg	1		08/04/20 15:41
1,2-Dichlorobenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,2-Dichloroethane	1.42	U	2.84	0.994	ug/Kg	1		08/04/20 15:41
1,2-Dichloropropane	7.10	U	14.2	4.40	ug/Kg	1		08/04/20 15:41
1,3,5-Trimethylbenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,3-Dichlorobenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
1,3-Dichloropropane	7.10	U	14.2	4.40	ug/Kg	1		08/04/20 15:41
1,4-Dichlorobenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
2,2-Dichloropropane	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
2-Butanone (MEK)	178	U	355	111	ug/Kg	1		08/04/20 15:41
2-Chlorotoluene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
2-Hexanone	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
4-Chlorotoluene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
4-Isopropyltoluene	71.0	U	142	35.5	ug/Kg	1		08/04/20 15:41
4-Methyl-2-pentanone (MIBK)	178	U	355	111	ug/Kg	1		08/04/20 15:41
Acetone	178	U	355	111	ug/Kg	1		08/04/20 15:41
Benzene	8.85	U	17.7	5.54	ug/Kg	1		08/04/20 15:41
Bromobenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Bromochloromethane	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Bromodichloromethane	1.42	U	2.84	0.880	ug/Kg	1		08/04/20 15:41
Bromoform	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Bromomethane	14.2	U	28.4	8.80	ug/Kg	1		08/04/20 15:41
Carbon disulfide	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
Carbon tetrachloride	8.85	U	17.7	5.54	ug/Kg	1		08/04/20 15:41
Chlorobenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S7**

Client Sample ID: **103880-B3S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813006
Lab Project ID: 1203813

Collection Date: 07/30/20 19:38
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):91.8
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	142	U	284	88.0	ug/Kg	1		08/04/20 15:41
Chloroform	2.84	U	5.68	1.42	ug/Kg	1		08/04/20 15:41
Chloromethane	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
cis-1,2-Dichloroethene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
cis-1,3-Dichloropropene	8.85	U	17.7	5.54	ug/Kg	1		08/04/20 15:41
Dibromochloromethane	3.55	U	7.10	2.13	ug/Kg	1		08/04/20 15:41
Dibromomethane	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Dichlorodifluoromethane	35.5	U	71.0	21.3	ug/Kg	1		08/04/20 15:41
Ethylbenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Freon-113	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
Hexachlorobutadiene	14.2	U	28.4	8.80	ug/Kg	1		08/04/20 15:41
Isopropylbenzene (Cumene)	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Methylene chloride	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
Methyl-t-butyl ether	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
Naphthalene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
n-Butylbenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
n-Propylbenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
o-Xylene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
P & M -Xylene	35.5	U	71.0	21.3	ug/Kg	1		08/04/20 15:41
sec-Butylbenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Styrene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
tert-Butylbenzene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
Tetrachloroethene	53.4		17.7	5.54	ug/Kg	1		08/04/20 15:41
Toluene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
trans-1,2-Dichloroethene	17.8	U	35.5	11.1	ug/Kg	1		08/04/20 15:41
trans-1,3-Dichloropropene	8.85	U	17.7	5.54	ug/Kg	1		08/04/20 15:41
Trichloroethene	3.55	U	7.10	2.13	ug/Kg	1		08/04/20 15:41
Trichlorofluoromethane	35.5	U	71.0	21.3	ug/Kg	1		08/04/20 15:41
Vinyl acetate	71.0	U	142	44.0	ug/Kg	1		08/04/20 15:41
Vinyl chloride	0.570	U	1.14	0.355	ug/Kg	1		08/04/20 15:41
Xylenes (total)	53.0	U	106	32.4	ug/Kg	1		08/04/20 15:41
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		71-136		%	1		08/04/20 15:41
4-Bromofluorobenzene (surr)	87.5		55-151		%	1		08/04/20 15:41
Toluene-d8 (surr)	98.2		85-116		%	1		08/04/20 15:41

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S7**

Client Sample ID: **103880-B3S7**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813006
Lab Project ID: 1203813

Collection Date: 07/30/20 19:38
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):91.8
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Analyst: KAJ
Analytical Date/Time: 08/04/20 15:41
Container ID: 1203813006-B

Prep Batch: VXX36051
Prep Method: SW5035A
Prep Date/Time: 07/30/20 19:38
Prep Initial Wt./Vol.: 43.854 g
Prep Extract Vol: 28.5815 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S17**

Client Sample ID: **103880-B3S17**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813007
Lab Project ID: 1203813

Collection Date: 07/30/20 20:08
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.1
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
2-Methylnaphthalene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Acenaphthene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Acenaphthylene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Anthracene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Benzo(a)Anthracene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Benzo[a]pyrene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Benzo[b]Fluoranthene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Benzo[g,h,i]perylene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Benzo[k]fluoranthene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Chrysene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Dibenzo[a,h]anthracene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Fluoranthene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Fluorene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Indeno[1,2,3-c,d] pyrene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Naphthalene	11.1	U	22.1	5.53	ug/Kg	1		08/21/20 13:55
Phenanthrene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Pyrene	13.9	U	27.7	6.91	ug/Kg	1		08/21/20 13:55
Surrogates								
2-Methylnaphthalene-d10 (surr)	78.2		58-103		%	1		08/21/20 13:55
Fluoranthene-d10 (surr)	78.4		54-113		%	1		08/21/20 13:55

Batch Information

Analytical Batch: XMS12211
Analytical Method: 8270D SIM (PAH)
Analyst: DSD
Analytical Date/Time: 08/21/20 13:55
Container ID: 1203813007-A

Prep Batch: XXX43624
Prep Method: SW3550C
Prep Date/Time: 08/12/20 09:48
Prep Initial Wt./Vol.: 22.583 g
Prep Extract Vol: 5 mL

Results of **103880-B3S17**

Client Sample ID: **103880-B3S17**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813007
Lab Project ID: 1203813

Collection Date: 07/30/20 20:08
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.1
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	10.4	J	22.0	6.82	mg/Kg	1		08/19/20 02:44
Surrogates								
5a Androstane (surr)	106		50-150		%	1		08/19/20 02:44

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/19/20 02:44
Container ID: 1203813007-A

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 08/11/20 13:11
Prep Initial Wt./Vol.: 30.28 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S17**

Client Sample ID: **103880-B3S17**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813007
Lab Project ID: 1203813

Collection Date: 07/30/20 20:08
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.1
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.994	J	2.98	0.895	mg/Kg	1		08/18/20 06:38
Surrogates								
4-Bromofluorobenzene (surr)	100		50-150		%	1		08/18/20 06:38

Batch Information

Analytical Batch: VFC15289
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/18/20 06:38
Container ID: 1203813007-B

Prep Batch: VXX36154
Prep Method: SW5035A
Prep Date/Time: 07/30/20 20:08
Prep Initial Wt./Vol.: 57.006 g
Prep Extract Vol: 30.6537 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S17**

Client Sample ID: **103880-B3S17**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813007
Lab Project ID: 1203813

Collection Date: 07/30/20 20:08
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.1
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	11.9	U	23.9	7.40	ug/Kg	1		08/04/20 15:56
1,1,1-Trichloroethane	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,1,2,2-Tetrachloroethane	1.20	U	2.39	0.740	ug/Kg	1		08/04/20 15:56
1,1,2-Trichloroethane	0.477	U	0.955	0.298	ug/Kg	1		08/04/20 15:56
1,1-Dichloroethane	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,1-Dichloroethene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,1-Dichloropropene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,2,3-Trichlorobenzene	29.9	U	59.7	17.9	ug/Kg	1		08/04/20 15:56
1,2,3-Trichloropropane	1.20	U	2.39	0.740	ug/Kg	1		08/04/20 15:56
1,2,4-Trichlorobenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,2,4-Trimethylbenzene	29.9	U	59.7	17.9	ug/Kg	1		08/04/20 15:56
1,2-Dibromo-3-chloropropane	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
1,2-Dibromoethane	0.595	U	1.19	0.478	ug/Kg	1		08/04/20 15:56
1,2-Dichlorobenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,2-Dichloroethane	1.20	U	2.39	0.836	ug/Kg	1		08/04/20 15:56
1,2-Dichloropropane	5.95	U	11.9	3.70	ug/Kg	1		08/04/20 15:56
1,3,5-Trimethylbenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,3-Dichlorobenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
1,3-Dichloropropane	5.95	U	11.9	3.70	ug/Kg	1		08/04/20 15:56
1,4-Dichlorobenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
2,2-Dichloropropane	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
2-Butanone (MEK)	149	U	298	93.1	ug/Kg	1		08/04/20 15:56
2-Chlorotoluene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
2-Hexanone	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
4-Chlorotoluene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
4-Isopropyltoluene	59.5	U	119	29.8	ug/Kg	1		08/04/20 15:56
4-Methyl-2-pentanone (MIBK)	149	U	298	93.1	ug/Kg	1		08/04/20 15:56
Acetone	149	U	298	93.1	ug/Kg	1		08/04/20 15:56
Benzene	7.45	U	14.9	4.66	ug/Kg	1		08/04/20 15:56
Bromobenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Bromochloromethane	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Bromodichloromethane	1.20	U	2.39	0.740	ug/Kg	1		08/04/20 15:56
Bromoform	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Bromomethane	11.9	U	23.9	7.40	ug/Kg	1		08/04/20 15:56
Carbon disulfide	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
Carbon tetrachloride	7.45	U	14.9	4.66	ug/Kg	1		08/04/20 15:56
Chlorobenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-B3S17**

Client Sample ID: **103880-B3S17**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813007
Lab Project ID: 1203813

Collection Date: 07/30/20 20:08
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.1
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	120	U	239	74.0	ug/Kg	1		08/04/20 15:56
Chloroform	2.39	U	4.78	1.19	ug/Kg	1		08/04/20 15:56
Chloromethane	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
cis-1,2-Dichloroethene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
cis-1,3-Dichloropropene	7.45	U	14.9	4.66	ug/Kg	1		08/04/20 15:56
Dibromochloromethane	2.98	U	5.97	1.79	ug/Kg	1		08/04/20 15:56
Dibromomethane	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Dichlorodifluoromethane	29.9	U	59.7	17.9	ug/Kg	1		08/04/20 15:56
Ethylbenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Freon-113	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
Hexachlorobutadiene	11.9	U	23.9	7.40	ug/Kg	1		08/04/20 15:56
Isopropylbenzene (Cumene)	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Methylene chloride	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
Methyl-t-butyl ether	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
Naphthalene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
n-Butylbenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
n-Propylbenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
o-Xylene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
P & M -Xylene	29.9	U	59.7	17.9	ug/Kg	1		08/04/20 15:56
sec-Butylbenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Styrene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
tert-Butylbenzene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
Tetrachloroethene	48.8		14.9	4.66	ug/Kg	1		08/04/20 15:56
Toluene	10.8	J	29.8	9.31	ug/Kg	1		08/04/20 15:56
trans-1,2-Dichloroethene	14.9	U	29.8	9.31	ug/Kg	1		08/04/20 15:56
trans-1,3-Dichloropropene	7.45	U	14.9	4.66	ug/Kg	1		08/04/20 15:56
Trichloroethene	2.98	U	5.97	1.79	ug/Kg	1		08/04/20 15:56
Trichlorofluoromethane	29.9	U	59.7	17.9	ug/Kg	1		08/04/20 15:56
Vinyl acetate	59.5	U	119	37.0	ug/Kg	1		08/04/20 15:56
Vinyl chloride	0.477	U	0.955	0.298	ug/Kg	1		08/04/20 15:56
Xylenes (total)	44.8	U	89.5	27.2	ug/Kg	1		08/04/20 15:56
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		71-136		%	1		08/04/20 15:56
4-Bromofluorobenzene (surr)	90.4		55-151		%	1		08/04/20 15:56
Toluene-d8 (surr)	99.5		85-116		%	1		08/04/20 15:56

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J flagging is activated

Results of **103880-B3S17**

Client Sample ID: **103880-B3S17**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813007
Lab Project ID: 1203813

Collection Date: 07/30/20 20:08
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):90.1
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Analyst: KAJ
Analytical Date/Time: 08/04/20 15:56
Container ID: 1203813007-B

Prep Batch: VXX36051
Prep Method: SW5035A
Prep Date/Time: 07/30/20 20:08
Prep Initial Wt./Vol.: 57.006 g
Prep Extract Vol: 30.6537 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-STB**

Client Sample ID: **103880-STB**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813008
Lab Project ID: 1203813

Collection Date: 07/30/20 09:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.25	U	2.51	0.753	mg/Kg	1		08/16/20 01:20
Surrogates								
4-Bromofluorobenzene (surr)	99.1		50-150		%	1		08/16/20 01:20

Batch Information

Analytical Batch: VFC15287
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/16/20 01:20
Container ID: 1203813008-A

Prep Batch: VXX36149
Prep Method: SW5035A
Prep Date/Time: 07/30/20 09:00
Prep Initial Wt./Vol.: 49.833 g
Prep Extract Vol: 25 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-STB**

Client Sample ID: **103880-STB**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813008
Lab Project ID: 1203813

Collection Date: 07/30/20 09:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	10.1	U	20.1	6.22	ug/Kg	1		08/04/20 11:33
1,1,1-Trichloroethane	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,1,2,2-Tetrachloroethane	1.00	U	2.01	0.622	ug/Kg	1		08/04/20 11:33
1,1,2-Trichloroethane	0.402	U	0.803	0.251	ug/Kg	1		08/04/20 11:33
1,1-Dichloroethane	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,1-Dichloroethene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,1-Dichloropropene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,2,3-Trichlorobenzene	25.1	U	50.2	15.1	ug/Kg	1		08/04/20 11:33
1,2,3-Trichloropropane	1.00	U	2.01	0.622	ug/Kg	1		08/04/20 11:33
1,2,4-Trichlorobenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,2,4-Trimethylbenzene	25.1	U	50.2	15.1	ug/Kg	1		08/04/20 11:33
1,2-Dibromo-3-chloropropane	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
1,2-Dibromoethane	0.500	U	1.00	0.401	ug/Kg	1		08/04/20 11:33
1,2-Dichlorobenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,2-Dichloroethane	1.00	U	2.01	0.702	ug/Kg	1		08/04/20 11:33
1,2-Dichloropropane	5.00	U	10.0	3.11	ug/Kg	1		08/04/20 11:33
1,3,5-Trimethylbenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,3-Dichlorobenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
1,3-Dichloropropane	5.00	U	10.0	3.11	ug/Kg	1		08/04/20 11:33
1,4-Dichlorobenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
2,2-Dichloropropane	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
2-Butanone (MEK)	126	U	251	78.3	ug/Kg	1		08/04/20 11:33
2-Chlorotoluene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
2-Hexanone	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
4-Chlorotoluene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
4-Isopropyltoluene	50.0	U	100	25.1	ug/Kg	1		08/04/20 11:33
4-Methyl-2-pentanone (MIBK)	126	U	251	78.3	ug/Kg	1		08/04/20 11:33
Acetone	126	U	251	78.3	ug/Kg	1		08/04/20 11:33
Benzene	6.25	U	12.5	3.91	ug/Kg	1		08/04/20 11:33
Bromobenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Bromochloromethane	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Bromodichloromethane	1.00	U	2.01	0.622	ug/Kg	1		08/04/20 11:33
Bromoform	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Bromomethane	10.1	U	20.1	6.22	ug/Kg	1		08/04/20 11:33
Carbon disulfide	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
Carbon tetrachloride	6.25	U	12.5	3.91	ug/Kg	1		08/04/20 11:33
Chlorobenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33

Print Date: 08/27/2020 12:09:37PM

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Results of **103880-STB**

Client Sample ID: **103880-STB**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813008
Lab Project ID: 1203813

Collection Date: 07/30/20 09:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroethane	101	U	201	62.2	ug/Kg	1		08/04/20 11:33
Chloroform	2.00	U	4.01	1.00	ug/Kg	1		08/04/20 11:33
Chloromethane	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
cis-1,2-Dichloroethene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
cis-1,3-Dichloropropene	6.25	U	12.5	3.91	ug/Kg	1		08/04/20 11:33
Dibromochloromethane	2.51	U	5.02	1.51	ug/Kg	1		08/04/20 11:33
Dibromomethane	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Dichlorodifluoromethane	25.1	U	50.2	15.1	ug/Kg	1		08/04/20 11:33
Ethylbenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Freon-113	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
Hexachlorobutadiene	10.1	U	20.1	6.22	ug/Kg	1		08/04/20 11:33
Isopropylbenzene (Cumene)	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Methylene chloride	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
Methyl-t-butyl ether	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
Naphthalene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
n-Butylbenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
n-Propylbenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
o-Xylene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
P & M -Xylene	25.1	U	50.2	15.1	ug/Kg	1		08/04/20 11:33
sec-Butylbenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Styrene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
tert-Butylbenzene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
Tetrachloroethene	6.25	U	12.5	3.91	ug/Kg	1		08/04/20 11:33
Toluene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
trans-1,2-Dichloroethene	12.6	U	25.1	7.83	ug/Kg	1		08/04/20 11:33
trans-1,3-Dichloropropene	6.25	U	12.5	3.91	ug/Kg	1		08/04/20 11:33
Trichloroethene	2.51	U	5.02	1.51	ug/Kg	1		08/04/20 11:33
Trichlorofluoromethane	25.1	U	50.2	15.1	ug/Kg	1		08/04/20 11:33
Vinyl acetate	50.0	U	100	31.1	ug/Kg	1		08/04/20 11:33
Vinyl chloride	0.402	U	0.803	0.251	ug/Kg	1		08/04/20 11:33
Xylenes (total)	37.6	U	75.3	22.9	ug/Kg	1		08/04/20 11:33
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		71-136		%	1		08/04/20 11:33
4-Bromofluorobenzene (surr)	85.4		55-151		%	1		08/04/20 11:33
Toluene-d8 (surr)	101		85-116		%	1		08/04/20 11:33

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Results of **103880-STB**

Client Sample ID: **103880-STB**
Client Project ID: **103880 Holiday Statn Store#611**
Lab Sample ID: 1203813008
Lab Project ID: 1203813

Collection Date: 07/30/20 09:00
Received Date: 07/31/20 13:08
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Analyst: KAJ
Analytical Date/Time: 08/04/20 11:33
Container ID: 1203813008-A

Prep Batch: VXX36051
Prep Method: SW5035A
Prep Date/Time: 07/30/20 09:00
Prep Initial Wt./Vol.: 49.833 g
Prep Extract Vol: 25 mL

Print Date: 08/27/2020 12:09:37PM

J flagging is activated

Method Blank

Blank ID: MB for HBN 1810100 [SPT/11101]
Blank Lab ID: 1573831

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813002, 1203813003, 1203813004, 1203813005, 1203813006, 1203813007

Results by **SM21 2540G**

Parameter	Results	LOQ/CL	DL	Units
Total Solids	100			%

Batch Information

Analytical Batch: SPT11101
Analytical Method: SM21 2540G
Instrument:
Analyst: EBH
Analytical Date/Time: 8/10/2020 12:00:00AM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Duplicate Sample Summary

Original Sample ID: 1203815025
Duplicate Sample ID: 1573832
Analysis Date: 08/10/2020 00:00
Matrix: Soil/Solid (dry weight)

QC for Samples:

1203813001, 1203813002, 1203813003, 1203813004, 1203813005, 1203813006, 1203813007

Results by **SM21 2540G**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Solids	95.7	95.7	%	0.09	(< 15)

Batch Information

Analytical Batch: SPT11101
Analytical Method: SM21 2540G
Instrument:
Analyst: EBH

Print Date: 08/27/2020 12:09:42PM

Method Blank

Blank ID: MB for HBN 1809861 [VXX/36051]
Blank Lab ID: 1572901

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	10.0U	20.0	6.20	ug/Kg
1,1,1-Trichloroethane	12.5U	25.0	7.80	ug/Kg
1,1,2,2-Tetrachloroethane	1.00U	2.00	0.620	ug/Kg
1,1,2-Trichloroethane	0.400U	0.800	0.250	ug/Kg
1,1-Dichloroethane	12.5U	25.0	7.80	ug/Kg
1,1-Dichloroethene	12.5U	25.0	7.80	ug/Kg
1,1-Dichloropropene	12.5U	25.0	7.80	ug/Kg
1,2,3-Trichlorobenzene	25.0U	50.0	15.0	ug/Kg
1,2,3-Trichloropropane	1.00U	2.00	0.620	ug/Kg
1,2,4-Trichlorobenzene	12.5U	25.0	7.80	ug/Kg
1,2,4-Trimethylbenzene	25.0U	50.0	15.0	ug/Kg
1,2-Dibromo-3-chloropropane	50.0U	100	31.0	ug/Kg
1,2-Dibromoethane	0.500U	1.00	0.400	ug/Kg
1,2-Dichlorobenzene	12.5U	25.0	7.80	ug/Kg
1,2-Dichloroethane	1.00U	2.00	0.700	ug/Kg
1,2-Dichloropropane	5.00U	10.0	3.10	ug/Kg
1,3,5-Trimethylbenzene	12.5U	25.0	7.80	ug/Kg
1,3-Dichlorobenzene	12.5U	25.0	7.80	ug/Kg
1,3-Dichloropropane	5.00U	10.0	3.10	ug/Kg
1,4-Dichlorobenzene	12.5U	25.0	7.80	ug/Kg
2,2-Dichloropropane	12.5U	25.0	7.80	ug/Kg
2-Butanone (MEK)	125U	250	78.0	ug/Kg
2-Chlorotoluene	12.5U	25.0	7.80	ug/Kg
2-Hexanone	50.0U	100	31.0	ug/Kg
4-Chlorotoluene	12.5U	25.0	7.80	ug/Kg
4-Isopropyltoluene	50.0U	100	25.0	ug/Kg
4-Methyl-2-pentanone (MIBK)	125U	250	78.0	ug/Kg
Acetone	125U	250	78.0	ug/Kg
Benzene	6.25U	12.5	3.90	ug/Kg
Bromobenzene	12.5U	25.0	7.80	ug/Kg
Bromochloromethane	12.5U	25.0	7.80	ug/Kg
Bromodichloromethane	1.00U	2.00	0.620	ug/Kg
Bromoform	12.5U	25.0	7.80	ug/Kg
Bromomethane	10.0U	20.0	6.20	ug/Kg
Carbon disulfide	50.0U	100	31.0	ug/Kg
Carbon tetrachloride	6.25U	12.5	3.90	ug/Kg
Chlorobenzene	12.5U	25.0	7.80	ug/Kg
Chloroethane	100U	200	62.0	ug/Kg

Method Blank

Blank ID: MB for HBN 1809861 [VXX/36051]
Blank Lab ID: 1572901

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Chloroform	2.00U	4.00	1.00	ug/Kg
Chloromethane	12.5U	25.0	7.80	ug/Kg
cis-1,2-Dichloroethene	12.5U	25.0	7.80	ug/Kg
cis-1,3-Dichloropropene	6.25U	12.5	3.90	ug/Kg
Dibromochloromethane	2.50U	5.00	1.50	ug/Kg
Dibromomethane	12.5U	25.0	7.80	ug/Kg
Dichlorodifluoromethane	25.0U	50.0	15.0	ug/Kg
Ethylbenzene	12.5U	25.0	7.80	ug/Kg
Freon-113	50.0U	100	31.0	ug/Kg
Hexachlorobutadiene	10.0U	20.0	6.20	ug/Kg
Isopropylbenzene (Cumene)	12.5U	25.0	7.80	ug/Kg
Methylene chloride	55.2J	100	31.0	ug/Kg
Methyl-t-butyl ether	50.0U	100	31.0	ug/Kg
Naphthalene	12.5U	25.0	7.80	ug/Kg
n-Butylbenzene	12.5U	25.0	7.80	ug/Kg
n-Propylbenzene	12.5U	25.0	7.80	ug/Kg
o-Xylene	12.5U	25.0	7.80	ug/Kg
P & M -Xylene	25.0U	50.0	15.0	ug/Kg
sec-Butylbenzene	12.5U	25.0	7.80	ug/Kg
Styrene	12.5U	25.0	7.80	ug/Kg
tert-Butylbenzene	12.5U	25.0	7.80	ug/Kg
Tetrachloroethene	6.25U	12.5	3.90	ug/Kg
Toluene	12.5U	25.0	7.80	ug/Kg
trans-1,2-Dichloroethene	12.5U	25.0	7.80	ug/Kg
trans-1,3-Dichloropropene	6.25U	12.5	3.90	ug/Kg
Trichloroethene	2.50U	5.00	1.50	ug/Kg
Trichlorofluoromethane	25.0U	50.0	15.0	ug/Kg
Vinyl acetate	50.0U	100	31.0	ug/Kg
Vinyl chloride	0.400U	0.800	0.250	ug/Kg
Xylenes (total)	37.5U	75.0	22.8	ug/Kg
Surrogates				
1,2-Dichloroethane-D4 (surr)	102	71-136		%
4-Bromofluorobenzene (surr)	92.3	55-151		%
Toluene-d8 (surr)	100	85-116		%

Method Blank

Blank ID: MB for HBN 1809861 [VXX/36051]
Blank Lab ID: 1572901

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Instrument: VRA Agilent GC/MS 7890B/5977A
Analyst: KAJ
Analytical Date/Time: 8/4/2020 8:39:00AM

Prep Batch: VXX36051
Prep Method: SW5035A
Prep Date/Time: 8/3/2020 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36051]
Blank Spike Lab ID: 1572902
Date Analyzed: 08/04/2020 08:54

Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
1,1,1,2-Tetrachloroethane	750	769	103	(78-125)
1,1,1-Trichloroethane	750	771	103	(73-130)
1,1,2,2-Tetrachloroethane	750	742	99	(70-124)
1,1,2-Trichloroethane	750	751	100	(78-121)
1,1-Dichloroethane	750	749	100	(76-125)
1,1-Dichloroethene	750	778	104	(70-131)
1,1-Dichloropropene	750	761	101	(76-125)
1,2,3-Trichlorobenzene	750	699	93	(66-130)
1,2,3-Trichloropropane	750	744	99	(73-125)
1,2,4-Trichlorobenzene	750	731	98	(67-129)
1,2,4-Trimethylbenzene	750	742	99	(75-123)
1,2-Dibromo-3-chloropropane	750	718	96	(61-132)
1,2-Dibromoethane	750	778	104	(78-122)
1,2-Dichlorobenzene	750	739	99	(78-121)
1,2-Dichloroethane	750	746	99	(73-128)
1,2-Dichloropropane	750	772	103	(76-123)
1,3,5-Trimethylbenzene	750	746	100	(73-124)
1,3-Dichlorobenzene	750	747	100	(77-121)
1,3-Dichloropropane	750	744	99	(77-121)
1,4-Dichlorobenzene	750	750	100	(75-120)
2,2-Dichloropropane	750	807	108	(67-133)
2-Butanone (MEK)	2250	2420	107	(51-148)
2-Chlorotoluene	750	760	101	(75-122)
2-Hexanone	2250	2320	103	(53-145)
4-Chlorotoluene	750	756	101	(72-124)
4-Isopropyltoluene	750	734	98	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2400	106	(65-135)
Acetone	2250	2420	107	(36-164)
Benzene	750	768	102	(77-121)
Bromobenzene	750	777	104	(78-121)
Bromochloromethane	750	768	102	(78-125)
Bromodichloromethane	750	799	107	(75-127)
Bromoform	750	782	104	(67-132)
Bromomethane	750	772	103	(53-143)

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36051]
Blank Spike Lab ID: 1572902
Date Analyzed: 08/04/2020 08:54

Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
Carbon disulfide	1130	1160	103	(63-132)
Carbon tetrachloride	750	772	103	(70-135)
Chlorobenzene	750	751	100	(79-120)
Chloroethane	750	790	105	(59-139)
Chloroform	750	740	99	(78-123)
Chloromethane	750	699	93	(50-136)
cis-1,2-Dichloroethene	750	766	102	(77-123)
cis-1,3-Dichloropropene	750	802	107	(74-126)
Dibromochloromethane	750	799	106	(74-126)
Dibromomethane	750	781	104	(78-125)
Dichlorodifluoromethane	750	739	99	(29-149)
Ethylbenzene	750	764	102	(76-122)
Freon-113	1130	1200	107	(66-136)
Hexachlorobutadiene	750	685	91	(61-135)
Isopropylbenzene (Cumene)	750	756	101	(68-134)
Methylene chloride	750	783	104	(70-128)
Methyl-t-butyl ether	1130	1130	100	(73-125)
Naphthalene	750	735	98	(62-129)
n-Butylbenzene	750	747	100	(70-128)
n-Propylbenzene	750	761	101	(73-125)
o-Xylene	750	762	102	(77-123)
P & M -Xylene	1500	1520	101	(77-124)
sec-Butylbenzene	750	725	97	(73-126)
Styrene	750	778	104	(76-124)
tert-Butylbenzene	750	726	97	(73-125)
Tetrachloroethene	750	789	105	(73-128)
Toluene	750	743	99	(77-121)
trans-1,2-Dichloroethene	750	758	101	(74-125)
trans-1,3-Dichloropropene	750	792	106	(71-130)
Trichloroethene	750	783	104	(77-123)
Trichlorofluoromethane	750	865	115	(62-140)
Vinyl acetate	750	834	111	(50-151)
Vinyl chloride	750	780	104	(56-135)
Xylenes (total)	2250	2280	101	(78-124)

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36051]
Blank Spike Lab ID: 1572902
Date Analyzed: 08/04/2020 08:54

Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
Surrogates				
1,2-Dichloroethane-D4 (surr)	750	100	100	(71-136)
4-Bromofluorobenzene (surr)	750	91.7	92	(55-151)
Toluene-d8 (surr)	750	99.7	100	(85-116)

Batch Information

Analytical Batch: **VMS20163**
Analytical Method: **SW8260D**
Instrument: **VRA Agilent GC/MS 7890B/5977A**
Analyst: **KAJ**

Prep Batch: **VXX36051**
Prep Method: **SW5035A**
Prep Date/Time: **08/03/2020 06:00**
Spike Init Wt./Vol.: 750 ug/Kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1573033
MS Sample ID: 1572903 MS
MSD Sample ID: 1572904 MSD

Analysis Date: 08/04/2020 12:20
Analysis Date: 08/04/2020 10:00
Analysis Date: 08/04/2020 10:16
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	4.80U	361	364	101	361	370	103	78-125	1.60	(< 20)
1,1,1-Trichloroethane	6.00U	361	374	104	361	367	102	73-130	1.70	(< 20)
1,1,2,2-Tetrachloroethane	0.480U	361	347	96	361	362	100	70-124	4.10	(< 20)
1,1,2-Trichloroethane	0.193U	361	355	98	361	365	101	78-121	2.90	(< 20)
1,1-Dichloroethane	6.00U	361	356	99	361	357	99	76-125	0.27	(< 20)
1,1-Dichloroethene	6.00U	361	388	108	361	367	102	70-131	5.40	(< 20)
1,1-Dichloropropene	6.00U	361	372	103	361	361	100	76-125	2.90	(< 20)
1,2,3-Trichlorobenzene	12.0U	361	289	80	361	343	95	66-130	17.10	(< 20)
1,2,3-Trichloropropane	0.480U	361	341	95	361	353	98	73-125	3.60	(< 20)
1,2,4-Trichlorobenzene	6.00U	361	320	89	361	350	97	67-129	8.70	(< 20)
1,2,4-Trimethylbenzene	12.0U	361	342	95	361	354	98	75-123	3.30	(< 20)
1,2-Dibromo-3-chloropropane	24.1U	361	325	90	361	355	99	61-132	8.80	(< 20)
1,2-Dibromoethane	0.240U	361	364	101	361	374	104	78-122	2.90	(< 20)
1,2-Dichlorobenzene	6.00U	361	345	96	361	347	96	78-121	0.55	(< 20)
1,2-Dichloroethane	0.480U	361	349	97	361	353	98	73-128	1.40	(< 20)
1,2-Dichloropropane	2.40U	361	364	101	361	364	101	76-123	0.07	(< 20)
1,3,5-Trimethylbenzene	6.00U	361	345	96	361	357	99	73-124	3.40	(< 20)
1,3-Dichlorobenzene	6.00U	361	349	97	361	355	99	77-121	1.70	(< 20)
1,3-Dichloropropane	2.40U	361	351	97	361	359	100	77-121	2.30	(< 20)
1,4-Dichlorobenzene	6.00U	361	356	99	361	358	99	75-120	0.66	(< 20)
2,2-Dichloropropane	6.00U	361	397	110	361	390	108	67-133	1.80	(< 20)
2-Butanone (MEK)	60.0U	1080	1070	99	1080	1160	107	51-148	8.20	(< 20)
2-Chlorotoluene	6.00U	361	354	98	361	357	99	75-122	0.72	(< 20)
2-Hexanone	24.1U	1080	1040	96	1080	1140	105	53-145	9.00	(< 20)
4-Chlorotoluene	6.00U	361	356	99	361	357	99	72-124	0.17	(< 20)
4-Isopropyltoluene	24.1U	361	340	94	361	354	98	73-127	4.10	(< 20)
4-Methyl-2-pentanone (MIBK)	60.0U	1080	1070	99	1080	1130	105	65-135	6.10	(< 20)
Acetone	60.0U	1080	1040	96	1080	1140	106	36-164	9.40	(< 20)
Benzene	3.00U	361	359	100	361	361	100	77-121	0.36	(< 20)
Bromobenzene	6.00U	361	364	101	361	365	101	78-121	0.31	(< 20)
Bromochloromethane	6.00U	361	362	100	361	360	100	78-125	0.64	(< 20)
Bromodichloromethane	0.480U	361	379	105	361	380	105	75-127	0.16	(< 20)
Bromoform	6.00U	361	370	103	361	380	105	67-132	2.80	(< 20)
Bromomethane	4.80U	361	415	115	361	373	103	53-143	10.60	(< 20)
Carbon disulfide	24.1U	541	605	112	541	556	103	63-132	8.50	(< 20)
Carbon tetrachloride	3.00U	361	375	104	361	369	102	70-135	1.70	(< 20)
Chlorobenzene	6.00U	361	358	99	361	361	100	79-120	0.77	(< 20)

Print Date: 08/27/2020 12:09:50PM

Matrix Spike Summary

Original Sample ID: 1573033
MS Sample ID: 1572903 MS
MSD Sample ID: 1572904 MSD

Analysis Date: 08/04/2020 12:20
Analysis Date: 08/04/2020 10:00
Analysis Date: 08/04/2020 10:16
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

		Matrix Spike (ug/Kg)				Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloroethane	48.0U	361	390	108		361	363	101	59-139	6.90	(< 20)
Chloroform	0.674J	361	352	97		361	352	97	78-123	0.02	(< 20)
Chloromethane	6.00U	361	353	98		361	339	94	50-136	4.20	(< 20)
cis-1,2-Dichloroethene	6.00U	361	363	101		361	362	100	77-123	0.35	(< 20)
cis-1,3-Dichloropropene	3.00U	361	381	106		361	383	106	74-126	0.55	(< 20)
Dibromochloromethane	1.20U	361	379	105		361	388	108	74-126	2.40	(< 20)
Dibromomethane	6.00U	361	364	101		361	368	102	78-125	1.30	(< 20)
Dichlorodifluoromethane	12.0U	361	377	104		361	324	90	29-149	15.20	(< 20)
Ethylbenzene	6.00U	361	359	100		361	364	101	76-122	1.50	(< 20)
Freon-113	24.1U	541	587	108		541	566	105	66-136	3.60	(< 20)
Hexachlorobutadiene	4.80U	361	370	103		361	361	100	61-135	2.30	(< 20)
Isopropylbenzene (Cumene)	6.00U	361	347	96		361	364	101	68-134	4.50	(< 20)
Methylene chloride	24.1U	361	374	104		361	371	103	70-128	1.00	(< 20)
Methyl-t-butyl ether	24.1U	541	518	96		541	537	99	73-125	3.70	(< 20)
Naphthalene	6.00U	361	320	89		361	370	103	62-129	14.40	(< 20)
n-Butylbenzene	6.00U	361	351	97		361	358	99	70-128	1.80	(< 20)
n-Propylbenzene	6.00U	361	352	98		361	359	99	73-125	1.90	(< 20)
o-Xylene	6.00U	361	357	99		361	363	101	77-123	1.60	(< 20)
P & M -Xylene	12.0U	721	711	99		721	719	100	77-124	1.10	(< 20)
sec-Butylbenzene	6.00U	361	335	93		361	345	96	73-126	3.00	(< 20)
Styrene	6.00U	361	365	101		361	372	103	76-124	2.00	(< 20)
tert-Butylbenzene	6.00U	361	338	94		361	345	96	73-125	2.20	(< 20)
Tetrachloroethene	3.00U	361	378	105		361	384	106	73-128	1.40	(< 20)
Toluene	6.00U	361	353	98		361	359	100	77-121	1.80	(< 20)
trans-1,2-Dichloroethene	6.00U	361	382	106		361	364	101	74-125	4.90	(< 20)
trans-1,3-Dichloropropene	3.00U	361	378	105		361	387	107	71-130	2.50	(< 20)
Trichloroethene	1.20U	361	375	104		361	370	103	77-123	1.30	(< 20)
Trichlorofluoromethane	12.0U	361	523	145	*	361	414	115	62-140	23.30	* (< 20)
Vinyl acetate	24.1U	361	392	109		361	409	114	50-151	4.30	(< 20)
Vinyl chloride	0.193U	361	360	100		361	379	105	56-135	4.90	(< 20)
Xylenes (total)	18.1U	1080	1070	99		1080	1080	100	78-124	1.20	(< 20)
Surrogates											
1,2-Dichloroethane-D4 (surr)		361	357	99		361	360	100	71-136	0.89	
4-Bromofluorobenzene (surr)		601	479	80		601	469	78	55-151	2.00	
Toluene-d8 (surr)		361	360	100		361	359	100	85-116	0.19	

Print Date: 08/27/2020 12:09:50PM

Matrix Spike Summary

Original Sample ID: 1573033
MS Sample ID: 1572903 MS
MSD Sample ID: 1572904 MSD

Analysis Date:
Analysis Date: 08/04/2020 10:00
Analysis Date: 08/04/2020 10:16
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007, 1203813008

Results by **SW8260D**

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: VMS20163
Analytical Method: SW8260D
Instrument: VRA Agilent GC/MS 7890B/5977A
Analyst: KAJ
Analytical Date/Time: 8/4/2020 10:00:00AM

Prep Batch: VXX36051
Prep Method: Vol. Extraction SW8260 Field Extracted L
Prep Date/Time: 8/3/2020 6:00:00AM
Prep Initial Wt./Vol.: 104.01g
Prep Extract Vol: 25.00mL

Print Date: 08/27/2020 12:09:50PM

Method Blank

Blank ID: MB for HBN 1810069 [VXX/36085]
Blank Lab ID: 1573699

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **AK101**

Parameter	Results	LOQ/CL	DL	Units
Benzene	0.00625U	0.0125	0.00400	mg/Kg
Ethylbenzene	0.0125U	0.0250	0.00780	mg/Kg
Gasoline Range Organics	1.25U	2.50	0.750	mg/Kg
o-Xylene	0.0125U	0.0250	0.00780	mg/Kg
P & M -Xylene	0.0250U	0.0500	0.0150	mg/Kg
Toluene	0.0125U	0.0250	0.00780	mg/Kg
Xylenes (total)	0.0375U	0.0750	0.0228	mg/Kg
Surrogates				
1,4-Difluorobenzene (surr)	96.8	72-119		%
4-Bromofluorobenzene (surr)	102	50-150		%

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/7/2020 12:22:00AM

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 8/6/2020 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36085]
Blank Spike Lab ID: 1573700
Date Analyzed: 08/06/2020 23:10

Spike Duplicate ID: LCSD for HBN 1203813 [VXX36085]
Spike Duplicate Lab ID: 1573701
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **AK101**

	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	12.5	13.8	110	12.5	13.7	109	(60-120)	0.69	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	1.25	107	107	1.25	105	105	(50-150)	1.70	

Batch Information

Analytical Batch: **VFC15270**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36085**
Prep Method: **SW5035A**
Prep Date/Time: **08/06/2020 06:00**
Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36085]
Blank Spike Lab ID: 1573702
Date Analyzed: 08/06/2020 23:46

Spike Duplicate ID: LCSD for HBN 1203813 [VXX36085]
Spike Duplicate Lab ID: 1573703
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **AK101**

	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	1.25	1.28	102	1.25	1.28	102	(75-125)	0.14	(< 20)
Ethylbenzene	1.25	1.13	90	1.25	1.14	91	(75-125)	1.20	(< 20)
o-Xylene	1.25	1.17	94	1.25	1.17	94	(75-125)	0.13	(< 20)
P & M -Xylene	2.50	2.27	91	2.50	2.28	91	(80-125)	0.47	(< 20)
Toluene	1.25	1.16	93	1.25	1.18	94	(70-125)	1.60	(< 20)
Xylenes (total)	3.75	3.44	92	3.75	3.46	92	(78-124)	0.36	(< 20)
Surrogates									
1,4-Difluorobenzene (surr)	1.25	103	103	1.25	102	102	(72-119)	1.60	

Batch Information

Analytical Batch: **VFC15270**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36085**
Prep Method: **SW5035A**
Prep Date/Time: **08/06/2020 06:00**
Spike Init Wt./Vol.: 1.25 mg/Kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 1.25 mg/Kg Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1203766006
MS Sample ID: 1573704 MS
MSD Sample ID: 1573705 MSD

Analysis Date: 08/07/2020 6:39
Analysis Date: 08/07/2020 6:57
Analysis Date: 08/07/2020 7:15
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **AK101**

		Matrix Spike (mg/Kg)			Spike Duplicate (mg/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	0.0115U	1.47	1.54	104	1.47	1.53	103	75-125	0.60	(< 20)
Ethylbenzene	0.0230U	1.47	1.45	98	1.47	1.43	97	75-125	1.30	(< 20)
o-Xylene	0.0230U	1.47	1.43	97	1.47	1.42	96	75-125	0.75	(< 20)
P & M -Xylene	0.0460U	2.96	2.87	97	2.96	2.84	96	80-125	1.20	(< 20)
Toluene	0.0230U	1.47	1.47	99	1.47	1.47	100	70-125	0.32	(< 20)
Xylenes (total)	0.0690U	4.44	4.30	97	4.44	4.25	96	78-124	1.00	(< 20)
Surrogates										
1,4-Difluorobenzene (surr)		1.47	1.45	98	1.47	1.41	96	72-119	2.10	

Batch Information

Analytical Batch: VFC15270
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/7/2020 6:57:00AM

Prep Batch: VXX36085
Prep Method: AK101 Extraction (S)
Prep Date/Time: 8/6/2020 6:00:00AM
Prep Initial Wt./Vol.: 56.08g
Prep Extract Vol: 25.00mL

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Method Blank

Blank ID: MB for HBN 1810069 [VXX/36085]
Blank Lab ID: 1573699

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **SW8021B**

Parameter	Results	LOQ/CL	DL	Units
Benzene	6.25U	12.5	4.00	ug/Kg
Ethylbenzene	12.5U	25.0	7.80	ug/Kg
o-Xylene	12.5U	25.0	7.80	ug/Kg
P & M -Xylene	25.0U	50.0	15.0	ug/Kg
Toluene	12.5U	25.0	7.80	ug/Kg
Xylenes (total)	37.5U	75.0	22.8	ug/Kg
Surrogates				
1,4-Difluorobenzene (surr)	96.8	72-119		%

Batch Information

Analytical Batch: VFC15270
Analytical Method: SW8021B
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/7/2020 12:22:00AM

Prep Batch: VXX36085
Prep Method: SW5035A
Prep Date/Time: 8/6/2020 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36085]
Blank Spike Lab ID: 1573702
Date Analyzed: 08/06/2020 23:46

Spike Duplicate ID: LCSD for HBN 1203813 [VXX36085]
Spike Duplicate Lab ID: 1573703
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **SW8021B**

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	1250	1280	102	1250	1280	102	(75-125)	0.14	(< 20)
Ethylbenzene	1250	1130	90	1250	1140	91	(75-125)	1.20	(< 20)
o-Xylene	1250	1170	94	1250	1170	94	(75-125)	0.13	(< 20)
P & M -Xylene	2500	2270	91	2500	2280	91	(80-125)	0.47	(< 20)
Toluene	1250	1160	93	1250	1180	94	(70-125)	1.60	(< 20)
Xylenes (total)	3750	3440	92	3750	3460	92	(78-124)	0.36	(< 20)
Surrogates									
1,4-Difluorobenzene (surr)	1250	103	103	1250	102	102	(72-119)	1.60	

Batch Information

Analytical Batch: **VFC15270**
Analytical Method: **SW8021B**
Instrument: **Agilent 7890A PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36085**
Prep Method: **SW5035A**
Prep Date/Time: **08/06/2020 06:00**
Spike Init Wt./Vol.: 1250 ug/Kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 1250 ug/Kg Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1203766006
MS Sample ID: 1573704 MS
MSD Sample ID: 1573705 MSD

Analysis Date: 08/07/2020 6:39
Analysis Date: 08/07/2020 6:57
Analysis Date: 08/07/2020 7:15
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813002, 1203813003, 1203813004, 1203813005

Results by **SW8021B**

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	11.5U	1474	1541	104	1474	1527	103	75-125	0.60	(< 20)
Ethylbenzene	23.0U	1474	1448	98	1474	1434	97	75-125	1.30	(< 20)
o-Xylene	23.0U	1474	1434	97	1474	1421	96	75-125	0.75	(< 20)
P & M -Xylene	46.0U	2961	2869	97	2961	2842	96	80-125	1.20	(< 20)
Toluene	23.0U	1474	1474	99	1474	1474	100	70-125	0.32	(< 20)
Xylenes (total)	69.0U	4436	4303	97	4436	4250	96	78-124	1.00	(< 20)
Surrogates										
1,4-Difluorobenzene (surr)		1474	1448	98	1474	1408	96	72-119	2.10	

Batch Information

Analytical Batch: VFC15270
Analytical Method: SW8021B
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/7/2020 6:57:00AM

Prep Batch: VXX36085
Prep Method: AK101 Extraction (S)
Prep Date/Time: 8/6/2020 6:00:00AM
Prep Initial Wt./Vol.: 56.08g
Prep Extract Vol: 25.00mL

Print Date: 08/27/2020 12:10:00PM

Method Blank

Blank ID: MB for HBN 1810506 [VXX/36149]
Blank Lab ID: 1575629

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813008

Results by **AK101**

Parameter	Results	LOQ/CL	DL	Units
Gasoline Range Organics	1.25U	2.50	0.750	mg/Kg
Surrogates				
1,4-Difluorobenzene (surr)	97.3	72-119		%
4-Bromofluorobenzene (surr)	85	50-150		%

Batch Information

Analytical Batch: VFC15287
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/15/2020 7:38:00PM

Prep Batch: VXX36149
Prep Method: SW5035A
Prep Date/Time: 8/15/2020 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 08/27/2020 12:10:01PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36149]
Blank Spike Lab ID: 1575630
Date Analyzed: 08/15/2020 19:02

Spike Duplicate ID: LCSD for HBN 1203813 [VXX36149]
Spike Duplicate Lab ID: 1575631
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813008

Results by **AK101**

	Blank Spike (mg/Kg)				Spike Duplicate (mg/Kg)					
Parameter	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	12.5	16.3	131	*	12.5	15.9	127	* (60-120)	2.80	(< 20)
Surrogates										
4-Bromofluorobenzene (surr)	1.25	91.3	91		1.25	91	91	(50-150)	0.31	

Batch Information

Analytical Batch: **VFC15287**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36149**
Prep Method: **SW5035A**
Prep Date/Time: **08/15/2020 06:00**
Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

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Method Blank

Blank ID: MB for HBN 1810522 [VXX/36154]
Blank Lab ID: 1575671

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813006, 1203813007

Results by **AK101**

Parameter	Results	LOQ/CL	DL	Units
Gasoline Range Organics	0.780J	2.50	0.750	mg/Kg
Surrogates				
1,4-Difluorobenzene (surr)	83	72-119		%
4-Bromofluorobenzene (surr)	83.8	50-150		%

Batch Information

Analytical Batch: VFC15289
Analytical Method: AK101
Instrument: Agilent 7890 PID/FID
Analyst: ALJ
Analytical Date/Time: 8/18/2020 2:44:00AM

Prep Batch: VXX36154
Prep Method: SW5035A
Prep Date/Time: 8/17/2020 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 08/27/2020 12:10:07PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [VXX36154]
Blank Spike Lab ID: 1575672
Date Analyzed: 08/18/2020 02:08

Spike Duplicate ID: LCSD for HBN 1203813 [VXX36154]
Spike Duplicate Lab ID: 1575673
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813006, 1203813007

Results by **AK101**

	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	12.5	13.2	106	12.5	13.3	106	(60-120)	0.43	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	1.25	96.9	97	1.25	92.1	92	(50-150)	5.10	

Batch Information

Analytical Batch: **VFC15289**
Analytical Method: **AK101**
Instrument: **Agilent 7890 PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36154**
Prep Method: **SW5035A**
Prep Date/Time: **08/17/2020 06:00**
Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

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Method Blank

Blank ID: MB for HBN 1810127 [XXX/43618]
Blank Lab ID: 1573964

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813002, 1203813003, 1203813004, 1203813005, 1203813006, 1203813007

Results by **AK102**

Parameter	Results	LOQ/CL	DL	Units
Diesel Range Organics	10.0U	20.0	6.20	mg/Kg
Surrogates				
5a Androstane (surr)	87.7	60-120		%

Batch Information

Analytical Batch: XFC15693
Analytical Method: AK102
Instrument: Agilent 7890B F
Analyst: CDM
Analytical Date/Time: 8/19/2020 1:14:00AM

Prep Batch: XXX43618
Prep Method: SW3550C
Prep Date/Time: 8/11/2020 1:11:24PM
Prep Initial Wt./Vol.: 30 g
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 12:10:12PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [XXX43618]
Blank Spike Lab ID: 1573965
Date Analyzed: 08/19/2020 01:24

Spike Duplicate ID: LCSD for HBN 1203813 [XXX43618]
Spike Duplicate Lab ID: 1573966
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813002, 1203813003, 1203813004, 1203813005, 1203813006, 1203813007

Results by **AK102**

	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range Organics	833	836	100	833	837	100	(75-125)	0.07	(< 20)
Surrogates									
5a Androstane (surr)	16.7	125	125 *	16.7	126	126 *	(60-120)	0.58	

Batch Information

Analytical Batch: **XFC15693**
Analytical Method: **AK102**
Instrument: **Agilent 7890B F**
Analyst: **CDM**

Prep Batch: **XXX43618**
Prep Method: **SW3550C**
Prep Date/Time: **08/11/2020 13:11**
Spike Init Wt./Vol.: 833 mg/Kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: 833 mg/Kg Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1810165 [XXX/43624]
Blank Lab ID: 1574131

Matrix: Soil/Solid (dry weight)

QC for Samples:
1203813001, 1203813003, 1203813006, 1203813007

Results by **8270D SIM (PAH)**

Parameter	Results	LOQ/CL	DL	Units
1-Methylnaphthalene	12.5U	25.0	6.25	ug/Kg
2-Methylnaphthalene	12.5U	25.0	6.25	ug/Kg
Acenaphthene	12.5U	25.0	6.25	ug/Kg
Acenaphthylene	12.5U	25.0	6.25	ug/Kg
Anthracene	12.5U	25.0	6.25	ug/Kg
Benzo(a)Anthracene	12.5U	25.0	6.25	ug/Kg
Benzo[a]pyrene	12.5U	25.0	6.25	ug/Kg
Benzo[b]Fluoranthene	12.5U	25.0	6.25	ug/Kg
Benzo[g,h,i]perylene	12.5U	25.0	6.25	ug/Kg
Benzo[k]fluoranthene	12.5U	25.0	6.25	ug/Kg
Chrysene	12.5U	25.0	6.25	ug/Kg
Dibenzo[a,h]anthracene	12.5U	25.0	6.25	ug/Kg
Fluoranthene	12.5U	25.0	6.25	ug/Kg
Fluorene	12.5U	25.0	6.25	ug/Kg
Indeno[1,2,3-c,d] pyrene	12.5U	25.0	6.25	ug/Kg
Naphthalene	10.0U	20.0	5.00	ug/Kg
Phenanthrene	12.5U	25.0	6.25	ug/Kg
Pyrene	12.5U	25.0	6.25	ug/Kg
Surrogates				
2-Methylnaphthalene-d10 (surr)	76	58-103		%
Fluoranthene-d10 (surr)	77.4	54-113		%

Batch Information

Analytical Batch: XMS12211
Analytical Method: 8270D SIM (PAH)
Instrument: Agilent GC 7890B/5977A SWA
Analyst: DSD
Analytical Date/Time: 8/21/2020 12:12:00PM

Prep Batch: XXX43624
Prep Method: SW3550C
Prep Date/Time: 8/12/2020 9:48:18AM
Prep Initial Wt./Vol.: 22.5 g
Prep Extract Vol: 5 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1203813 [XXX43624]
Blank Spike Lab ID: 1574132
Date Analyzed: 08/21/2020 12:33

Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007

Results by **8270D SIM (PAH)**

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
1-Methylnaphthalene	111	94.7	85	(43-111)
2-Methylnaphthalene	111	93.2	84	(39-114)
Acenaphthene	111	94.1	85	(44-111)
Acenaphthylene	111	98.4	89	(39-116)
Anthracene	111	98.3	89	(50-114)
Benzo(a)Anthracene	111	92.3	83	(54-122)
Benzo[a]pyrene	111	102	92	(50-125)
Benzo[b]Fluoranthene	111	98.2	88	(53-128)
Benzo[g,h,i]perylene	111	93.7	84	(49-127)
Benzo[k]fluoranthene	111	103	93	(56-123)
Chrysene	111	96.6	87	(57-118)
Dibenzo[a,h]anthracene	111	95.0	86	(50-129)
Fluoranthene	111	94.7	85	(55-119)
Fluorene	111	93.6	84	(47-114)
Indeno[1,2,3-c,d] pyrene	111	103	93	(49-130)
Naphthalene	111	87.8	79	(38-111)
Phenanthrene	111	94.6	85	(49-113)
Pyrene	111	91.8	83	(55-117)
Surrogates				
2-Methylnaphthalene-d10 (surr)	111	77.9	78	(58-103)
Fluoranthene-d10 (surr)	111	77.2	77	(54-113)

Batch Information

Analytical Batch: **XMS12211**
Analytical Method: **8270D SIM (PAH)**
Instrument: **Agilent GC 7890B/5977A SWA**
Analyst: **DSD**

Prep Batch: **XXX43624**
Prep Method: **SW3550C**
Prep Date/Time: **08/12/2020 09:48**
Spike Init Wt./Vol.: 111 ug/Kg Extract Vol: 5 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1203851010
MS Sample ID: 1574133 MS
MSD Sample ID: 1574134 MSD

Analysis Date: 08/21/2020 16:40
Analysis Date: 08/21/2020 17:01
Analysis Date: 08/21/2020 17:22
Matrix: Soil/Solid (dry weight)

QC for Samples: 1203813001, 1203813003, 1203813006, 1203813007

Results by **8270D SIM (PAH)**

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1-Methylnaphthalene	12.9U	113	99.7	88	115	100	87	43-111	0.31	(< 20)
2-Methylnaphthalene	12.9U	113	97.2	86	115	97.5	85	39-114	0.33	(< 20)
Acenaphthene	12.9U	113	98.0	87	115	96.4	84	44-111	1.70	(< 20)
Acenaphthylene	12.9U	113	103	91	115	103	90	39-116	0.50	(< 20)
Anthracene	12.9U	113	101	89	115	100	88	50-114	0.07	(< 20)
Benzo(a)Anthracene	12.9U	113	91.5	81	115	93.3	81	54-122	1.90	(< 20)
Benzo[a]pyrene	12.9U	113	99.2	88	115	102	89	50-125	3.10	(< 20)
Benzo[b]Fluoranthene	12.9U	113	100	88	115	103	90	53-128	2.90	(< 20)
Benzo[g,h,i]perylene	12.9U	113	85.3	75	115	90.1	79	49-127	5.60	(< 20)
Benzo[k]fluoranthene	12.9U	113	94.7	84	115	97.4	85	56-123	2.80	(< 20)
Chrysene	12.9U	113	93.9	83	115	96.8	84	57-118	3.00	(< 20)
Dibenzo[a,h]anthracene	12.9U	113	87.7	77	115	92.5	81	50-129	5.40	(< 20)
Fluoranthene	12.9U	113	96.2	85	115	97.5	85	55-119	1.40	(< 20)
Fluorene	12.9U	113	97.7	86	115	96.9	85	47-114	0.82	(< 20)
Indeno[1,2,3-c,d] pyrene	12.9U	113	94.5	83	115	99.0	86	49-130	4.60	(< 20)
Naphthalene	10.3U	113	91.5	81	115	90.5	79	38-111	1.20	(< 20)
Phenanthrene	12.9U	113	95.4	84	115	96.2	84	49-113	0.72	(< 20)
Pyrene	12.9U	113	93.2	82	115	94.8	83	55-117	1.80	(< 20)
Surrogates										
2-Methylnaphthalene-d10 (surr)		113	88.7	78	115	88.1	77	58-103	0.74	
Fluoranthene-d10 (surr)		113	86.4	76	115	88.4	77	54-113	2.30	

Batch Information

Analytical Batch: XMS12211
Analytical Method: 8270D SIM (PAH)
Instrument: Agilent GC 7890B/5977A SWA
Analyst: DSD
Analytical Date/Time: 8/21/2020 5:01:00PM

Prep Batch: XXX43624
Prep Method: Sonication Extr Soil 8270 PAH SIM 5ml
Prep Date/Time: 8/12/2020 9:48:18AM
Prep Initial Wt./Vol.: 22.88g
Prep Extract Vol: 5.00mL

Print Date: 08/27/2020 12:10:21PM

Shannon & Wilson, Inc.
5430 Fairbanks Street, Suite 3
Anchorage, Alaska 99518
(907) 561-2120
Fax (206) 695-6777

1203813

SGS North America Inc.

Date	Time	Sample ID	Total Containers	GRO- AK101	DRO-AK102	VOCs-EPA 8260D	BTEX-EPA 8021B	PAHs- EPA 8270D SIM			
				MeOH	4C	MeOH	MeOH	4C			
7/30/2020	11:00	(1AB) 103880-B1S4	2	X	X	X		X			
7/30/2020	11:25	(2AB) 103880-B1S6	2	X	X		X				
7/30/2020	15:20	(3AB) 103880-B2S3	2	X	X	X		X			
7/30/2020	16:15	(4AB) 103880-B2S7	2	X	X		X				
7/30/2020	19:20	(5AB) 103880-B3S5	2	X	X		X				
7/30/2020	19:38	(6AB) 103880-B3S7	2	X	X	X		X			
7/30/2020	20:08	(7AB) 103880-B3S17	2	X	X	X		X			
7/30/2020	9:00	(8A) 103880-STB	1	X		X					

Relinquished By:	**Relinquished By:**	**Project Information**
Signature:	Signature:	Project Number: 103880
Print Name: Alec Rizzo	Print Name:	Project Name: Holiday Station Store #611
Company: Shannon & Wilson, Inc.	Company:	Contact: Dan McMahon/ Alec Rizzo p# 365300 x1D
Date: 7/31/20	Date:	Sampler: AJR
Time: 1300	Time:	Special Instructions:
Received By:	**Received By:**	**Sample Receipt**
Signature:	Signature: RJC	Shipped Via: Hand Delivered
Print Name:	Print Name: Ryan Conlon	
Company:	Company: SGS	Cooler Temperature Upon Arrival: 3.2 DSG
Date:	Date: 7/31/20	Sample Matrix: Soil
Time:	Time: 13:08	**10 Working DAY TAT, Terrabase TF3 File Format**

HD Absent

e-Sample Receipt Form

SGS Workorder #: **1203813**

1 2 0 3 8 1 3

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		Yes — Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	absent
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
	N/A	**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 3.2 °C Therm. ID: D59
		Cooler ID: @ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
	N/A	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	Yes	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/A	
Were all soil VOAs field extracted with MeOH+BFB?	Yes	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1203813001-A	No Preservative Required	OK			
1203813001-B	Methanol field pres. 4 C	OK			
1203813002-A	No Preservative Required	OK			
1203813002-B	Methanol field pres. 4 C	OK			
1203813003-A	No Preservative Required	OK			
1203813003-B	Methanol field pres. 4 C	OK			
1203813004-A	No Preservative Required	OK			
1203813004-B	Methanol field pres. 4 C	OK			
1203813005-A	No Preservative Required	OK			
1203813005-B	Methanol field pres. 4 C	OK			
1203813006-A	No Preservative Required	OK			
1203813006-B	Methanol field pres. 4 C	OK			
1203813007-A	No Preservative Required	OK			
1203813007-B	Methanol field pres. 4 C	OK			
1203813008-A	Methanol field pres. 4 C	OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
QN - Insufficient sample quantity provided.

LABORATORY DATA REVIEW CHECKLIST

Completed by: Alec Rizzo
Title: Holiday Station Store #611
Date: 8/28/2020

Consultant Firm: Shannon & Wilson, Inc.

Laboratory Name: SGS North America Inc.
Laboratory Report Number: 1203813
Laboratory Report Date: 8/21/2020

Contaminated Site Name: Holiday Station Store #611 Dispensers
ADEC File Number: 2100.26.623
Hazard Identification Number: 27225

(**NOTE**: ***NA*** = not applicable; Text in *italics* added by Shannon & Wilson, Inc.)

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses? **Yes / No / NA**
Comments:

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
Yes / No / NA
Comments: *The samples were not transferred to another "network" laboratory or sub-contracted to an alternate laboratory.*

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?
Yes / No / NA
Comments**:**

b. Correct analyses requested? **Yes / No / NA**
Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes / No / NA
Comments: *The cooler temperature blank was 3.2° Celsius.*

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, VOCs, etc.)? **Yes / No / NA**
Comments:

c. Sample condition documented - broken, leaking (MeOH), zero headspace (VOC vials)? **Yes / No / NA**
Comments:

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.? **Yes / No / NA**
Comments: *No discrepancies were noted.*

e. Data quality or usability affected?
Comments: *Data quality/usability considered unaffected; see above.*

4. Case Narrative

a. Present and understandable? **Yes / No / NA**
Comments:

b. Discrepancies, errors or QC failures noted by the lab? **Yes / No / NA**
Comments: *The case narrative noted the following:*

- *LCS/LCSD – AK102 - Surrogate recovery in the LCS/LCSD for 5a androstane does not meet QC criteria; however, the surrogate recoveries in the samples are within criteria.*
- *LCS/LCSD – AK101 - LCS recovery for GRO does not meet QC criteria. This analyte is not detected above the LOQ in the associated samples.*
- *MB – 8260D - Methylene chloride was detected in the method blank above 1/2 the LOQ but less than the LOQ.*
- *MS - 8260D – MS recovery for trichlorofluoromethane does not meet QC criteria. Refer to LCS for accuracy requirements.*
- *MSD - 8260D – MS/MSD RPD for trichlorofluoromethane does not meet QC criteria. This analyte was not detected above the LOQ in the parent sample.*

c. Were all corrective actions documented? **Yes / No / NA**
Comments: *See above.*

d. What is the effect on data quality/usability, according to the case narrative?
Comments: *See above.*

5. Sample Results

a. Correct analyses performed/reported as requested on COC? **Yes / No / NA**
Comments:

b. All applicable holding times met? **Yes / No / NA**
Comments:

c. All soils reported on a dry weight basis? **Yes / No / NA**
Comments:

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project? **Yes / No / NA**
Comments*: The LOQs for 1,2,3-Trichloropropane, 1,2-Dibromoethane, and Dibromochloromethane exceed the ADEC cleanup levels.*

e. Data quality or usability affected?
Comments: *There is a potential that the target analytes are present at concentrations greater than the ADEC cleanup level, but less than the LOQ; however, the analytes were not detected at estimated concentrations in the project samples.*

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis, and 20 samples?
Yes / No / NA
Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?
Yes / No / NA
Comments: *GRO* and *methylene chloride were detected in the method blanks at concentrations less than the LOQ.*

iii. If above LOQ or project specified objectives, what samples are affected?
Comments:

- *GRO: B3S7 and B317*
- *Methylene Chloride: B1S4, B2S3, B3S7, B3S17, and STB*

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes / No / NA
Comments: *Methylene chloride was not detected above the LOQ in the project samples, therefore flagging is not required. When the reported concentrations are within 10 times the reported blank concentration, the project samples are flagged "B." GRO was detected at estimated concentrations in Samples B3S7 and B3S17 at levels less than the LOQ; therefore, the sample concentrations are reported as non-detect at the LOQ and flagged "B."*

v. Data quality or usability affected?
Comments: *See above.*

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis, and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846) **Yes / No / NA**
Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples? **Yes / No / NA**
Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable. (AK petroleum methods: AK 101 60%-120%, AK 102 75%-125%, AK 103 60%-120%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments:

- *AK101 - LCS/LCSD recovery for GRO does not meet QC criteria. This analyte is not detected above the LOQ in the associated samples.*
- *AK102 - Surrogate recovery in the LCS/LCSD for 5a androstane does not meet QC criteria; however, the surrogate recoveries in the samples are within criteria.*

iv. Precision – All relative percent differences (RPDs) reported and less than method or laboratory limits and project specified objectives, if applicable. RPD reported from LCS/LCSD, and/or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: *For AK101, Sample 103880-STB is potentially affected. However, GRO was not detected in the project sample. For AK102, all project samples are potentially affected by surrogate recovery QC failures, except sample STB.*

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined? **Yes / No / NA**
Comments: *GRO was not detected above the LOQ in Sample STB, therefore flagging is not required. The AK102 surrogate recoveries for the project samples are within criteria, therefore, flagging is not required.*

vii. Data quality or usability affected?
Comments*: No, see above.*

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis, and 20 samples?
Yes / No / NA
Comments:

ii. Metals/Inorganics - One MS and one MSD reported per matrix, analysis and 20 samples? **Yes / No / NA**
Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable. (AK petroleum methods: AK 101 60%-120%, AK 102 75%-125%, AK 103 60%-120%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments: *MS recovery for trichlorofluoromethane does not meet QC criteria.*

iv. Precision – All relative percent differences (RPDs) reported and less than method or laboratory limits and project specified objectives, if applicable. RPD reported from MS/MSD, and/or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments: *MS/MSD RPD for trichlorofluoromethane does not meet QC criteria.*

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: *Samples B1S4, B2S3, B3S7, B3S17, and STB are potentially affected.*

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?
Yes / No / NA
Comments: *Trichlorofluoromethane was not detected above the LOQ in the project samples, therefore flagging is not required.*

vii. Data quality or usability affected?
Comments*: No, see above.*

d. Surrogates - Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses - field, QC, and laboratory samples? **Yes / No / NA**
Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages) **Yes / No / NA**
Comments:

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined? **Yes / No / NA**
Comments:

iv. Data quality or usability affected?
Comments: *No, see above.*

e. Trip Blank - Volatile analyses only (GRO, BTEX, VOCs, etc.)

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? **Yes / No / NA**
Comments:

ii. Is the cooler used to transport the trip blank and volatile samples clearly indicated on the COC? **Yes / No / NA**
Comments: *Only one cooler was used to transport the samples.*

iii. All results less than LOQ and project specified objectives? **Yes / No / NA**
Comments*:*

iv. If above LOQ or project specified DQOs, what samples are affected?
Comments:

v. Data quality or usability affected?
Comments: *No, see above.*

f. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples? **Yes / No / NA**
Comments: *Duplicate sample B3S17 (duplicate of B3S7) was submitted to the laboratory.*

ii. Were the field duplicates submitted blind to the lab? **Yes / No / NA**
Comments*:*

iii. Precision – All relative percent differences (RPDs) less than specified project objectives? (Recommended: 30% for water, 50% for soil) **Yes / No / NA**
Comments:

iv. Data quality or usability affected?
Comments:

g. Decontamination or Equipment Blank (if not applicable, a comment stating why must be entered below)**.**

Yes / No / NA

Comments: *A decontamination blank was not included in our ADEC-approved workplan.*

i. All results less than LOQ and project specified objectives?

Yes / No / NA

Comments:

ii. If above LOQ or project specified objectives, what samples are affected?

Comments:

iii. Data quality or usability affected?

Comments:

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate? **Yes / No / NA**

Comments: *A key is provided on Page 3 of the SGS Laboratory Report.*

Laboratory Report of Analysis

To: Shannon & Wilson, Inc.
5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907)433-3223

Report Number: **1203895**

Client Project: **103880 HolidayStationStore#611**

Dear Dan McMahon,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

_____

Justin Nelson Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **Shannon & Wilson, Inc.**
SGS Project: **1203895**
Project Name/Site: **103880 HolidayStationStore#611**
Project Contact: **Dan McMahon**

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

SGS North America Inc. 200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
103880-MW1	1203895001	08/03/2020	08/04/2020	Water (Surface, Eff., Ground)
103880-MW2	1203895002	08/03/2020	08/04/2020	Water (Surface, Eff., Ground)
103880-MW12	1203895003	08/03/2020	08/04/2020	Water (Surface, Eff., Ground)
103880-MW3	1203895004	08/03/2020	08/04/2020	Water (Surface, Eff., Ground)
103880-WTB	1203895005	08/03/2020	08/04/2020	Water (Surface, Eff., Ground)

Method	Method Description
8270D SIM LV (PAH)	8270 PAH SIM GC/MS LV
AK102	DRO Low Volume (W)
AK101	Gasoline Range Organics (W)
SW8260D	Volatile Organic Compounds (W) FULL

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
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Detectable Results Summary

Client Sample ID: **103880-MW1**
Lab Sample ID: 1203895001
Semivolatile Organic Fuels
Volatile GC/MS

Parameter	Result	Units
Diesel Range Organics	0.267J	mg/L
Dichlorodifluoromethane	2.40	ug/L

Client Sample ID: **103880-MW2**
Lab Sample ID: 1203895002
Semivolatile Organic Fuels
Volatile Fuels
Volatile GC/MS

Parameter	Result	Units
Diesel Range Organics	0.342J	mg/L
Gasoline Range Organics	0.0315J	mg/L
Dichlorodifluoromethane	1.23	ug/L
Trichlorofluoromethane	0.704J	ug/L

Client Sample ID: **103880-MW12**
Lab Sample ID: 1203895003
Semivolatile Organic Fuels
Volatile GC/MS

Parameter	Result	Units
Diesel Range Organics	0.275J	mg/L
Dichlorodifluoromethane	1.19	ug/L
Trichlorofluoromethane	0.683J	ug/L

Client Sample ID: **103880-MW3**
Lab Sample ID: 1203895004
Semivolatile Organic Fuels
Volatile GC/MS

Parameter	Result	Units
Diesel Range Organics	0.388J	mg/L
Dichlorodifluoromethane	1.91	ug/L
Tetrachloroethene	0.864J	ug/L

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
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Results of **103880-MW1**

Client Sample ID: **103880-MW1**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895001
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
2-Methylnaphthalene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Acenaphthene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Acenaphthylene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Anthracene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Benzo(a)Anthracene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Benzo[a]pyrene	0.0100	U	0.0200	0.00620	ug/L	1		08/12/20 17:42
Benzo[b]Fluoranthene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Benzo[g,h,i]perylene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Benzo[k]fluoranthene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Chrysene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Dibenzo[a,h]anthracene	0.0100	U	0.0200	0.00620	ug/L	1		08/12/20 17:42
Fluoranthene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Fluorene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Indeno[1,2,3-c,d] pyrene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Naphthalene	0.0500	U	0.100	0.0310	ug/L	1		08/12/20 17:42
Phenanthrene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Pyrene	0.0250	U	0.0500	0.0150	ug/L	1		08/12/20 17:42
Surrogates								
2-Methylnaphthalene-d10 (surr)	41.2		37-78		%	1		08/12/20 17:42
Fluoranthene-d10 (surr)	61.4		24-116		%	1		08/12/20 17:42

Batch Information

Analytical Batch: XMS12186
Analytical Method: 8270D SIM LV (PAH)
Analyst: DSD
Analytical Date/Time: 08/12/20 17:42
Container ID: 1203895001-C

Prep Batch: XXX43592
Prep Method: SW3535A
Prep Date/Time: 08/07/20 11:30
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Results of **103880-MW1**

Client Sample ID: **103880-MW1**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895001
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.267	J	0.577	0.173	mg/L	1		08/17/20 16:06
Surrogates								
5a Androstane (surr)	92.6		50-150		%	1		08/17/20 16:06

Batch Information

Analytical Batch: XFC15691
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/17/20 16:06
Container ID: 1203895001-A

Prep Batch: XXX43595
Prep Method: SW3520C
Prep Date/Time: 08/07/20 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Results of **103880-MW1**

Client Sample ID: **103880-MW1**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895001
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0310	mg/L	1		08/12/20 15:30
Surrogates								
4-Bromofluorobenzene (surr)	77.8		50-150		%	1		08/12/20 15:30

Batch Information

Analytical Batch: VFC15280
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/12/20 15:30
Container ID: 1203895001-F

Prep Batch: VXX36109
Prep Method: SW5030B
Prep Date/Time: 08/12/20 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-MW1**

Client Sample ID: **103880-MW1**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895001
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/20 18:37
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/20 18:37
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,2-Dichloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/20 18:37
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Bromomethane	2.50	U	5.00	2.00	ug/L	1		08/05/20 18:37
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37

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J flagging is activated

Results of **103880-MW1**

Client Sample ID: **103880-MW1**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895001
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Chloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:37
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Dichlorodifluoromethane	2.40		1.00	0.310	ug/L	1		08/05/20 18:37
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Freon-113	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
Naphthalene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/05/20 18:37
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Styrene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Toluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Trichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:37
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:37
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		08/05/20 18:37
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/05/20 18:37
Surrogates								
1,2-Dichloroethane-D4 (surr)	104		81-118		%	1		08/05/20 18:37
4-Bromofluorobenzene (surr)	103		85-114		%	1		08/05/20 18:37
Toluene-d8 (surr)	101		89-112		%	1		08/05/20 18:37

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J flagging is activated

Results of **103880-MW1**

Client Sample ID: **103880-MW1**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895001
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20164
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 08/05/20 18:37
Container ID: 1203895001-H

Prep Batch: VXX36056
Prep Method: SW5030B
Prep Date/Time: 08/05/20 13:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **103880-MW2**

Client Sample ID: **103880-MW2**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895002
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
2-Methylnaphthalene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Acenaphthene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Acenaphthylene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Anthracene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Benzo(a)Anthracene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Benzo[a]pyrene	0.00965	U	0.0193	0.00598	ug/L	1		08/12/20 18:03
Benzo[b]Fluoranthene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Benzo[g,h,i]perylene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Benzo[k]fluoranthene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Chrysene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Dibenzo[a,h]anthracene	0.00965	U	0.0193	0.00598	ug/L	1		08/12/20 18:03
Fluoranthene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Fluorene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Indeno[1,2,3-c,d] pyrene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Naphthalene	0.0483	U	0.0965	0.0299	ug/L	1		08/12/20 18:03
Phenanthrene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Pyrene	0.0242	U	0.0483	0.0145	ug/L	1		08/12/20 18:03
Surrogates								
2-Methylnaphthalene-d10 (surr)	54		37-78		%	1		08/12/20 18:03
Fluoranthene-d10 (surr)	67.2		24-116		%	1		08/12/20 18:03

Batch Information

Analytical Batch: XMS12186
Analytical Method: 8270D SIM LV (PAH)
Analyst: DSD
Analytical Date/Time: 08/12/20 18:03
Container ID: 1203895002-C

Prep Batch: XXX43592
Prep Method: SW3535A
Prep Date/Time: 08/07/20 11:30
Prep Initial Wt./Vol.: 259 mL
Prep Extract Vol: 1 mL

Print Date: 08/21/2020 11:15:11AM

J flagging is activated

Results of **103880-MW2**

Client Sample ID: **103880-MW2**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895002
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.342	J	0.577	0.173	mg/L	1		08/17/20 16:16
Surrogates								
5a Androstane (surr)	89.9		50-150		%	1		08/17/20 16:16

Batch Information

Analytical Batch: XFC15691
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/17/20 16:16
Container ID: 1203895002-A

Prep Batch: XXX43595
Prep Method: SW3520C
Prep Date/Time: 08/07/20 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Results of **103880-MW2**

Client Sample ID: **103880-MW2**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895002
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0315	J	0.100	0.0310	mg/L	1		08/07/20 17:51
Surrogates								
4-Bromofluorobenzene (surr)	97.6		50-150		%	1		08/07/20 17:51

Batch Information

Analytical Batch: VFC15272
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 17:51
Container ID: 1203895002-E

Prep Batch: VXX36088
Prep Method: SW5030B
Prep Date/Time: 08/07/20 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-MW2**

Client Sample ID: **103880-MW2**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895002
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/20 18:52
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/20 18:52
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,2-Dichloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/20 18:52
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Bromomethane	2.50	U	5.00	2.00	ug/L	1		08/05/20 18:52
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52

Print Date: 08/21/2020 11:15:11AM

J flagging is activated

Results of **103880-MW2**

Client Sample ID: **103880-MW2**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895002
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Chloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 18:52
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Dichlorodifluoromethane	1.23		1.00	0.310	ug/L	1		08/05/20 18:52
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Freon-113	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
Naphthalene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/05/20 18:52
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Styrene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Toluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Trichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 18:52
Trichlorofluoromethane	0.704	J	1.00	0.310	ug/L	1		08/05/20 18:52
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		08/05/20 18:52
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		08/05/20 18:52
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/05/20 18:52
Surrogates								
1,2-Dichloroethane-D4 (surr)	105		81-118		%	1		08/05/20 18:52
4-Bromofluorobenzene (surr)	104		85-114		%	1		08/05/20 18:52
Toluene-d8 (surr)	101		89-112		%	1		08/05/20 18:52

Print Date: 08/21/2020 11:15:11AM

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Results of **103880-MW2**

Client Sample ID: **103880-MW2**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895002
Lab Project ID: 1203895

Collection Date: 08/03/20 13:30
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20164
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 08/05/20 18:52
Container ID: 1203895002-H

Prep Batch: VXX36056
Prep Method: SW5030B
Prep Date/Time: 08/05/20 13:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-MW12**

Client Sample ID: **103880-MW12**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895003
Lab Project ID: 1203895

Collection Date: 08/03/20 14:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
2-Methylnaphthalene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Acenaphthene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Acenaphthylene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Anthracene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Benzo(a)Anthracene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Benzo[a]pyrene	0.00960	U	0.0192	0.00596	ug/L	1		08/12/20 18:23
Benzo[b]Fluoranthene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Benzo[g,h,i]perylene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Benzo[k]fluoranthene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Chrysene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Dibenzo[a,h]anthracene	0.00960	U	0.0192	0.00596	ug/L	1		08/12/20 18:23
Fluoranthene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Fluorene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Indeno[1,2,3-c,d] pyrene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Naphthalene	0.0481	U	0.0962	0.0298	ug/L	1		08/12/20 18:23
Phenanthrene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Pyrene	0.0240	U	0.0481	0.0144	ug/L	1		08/12/20 18:23
Surrogates								
2-Methylnaphthalene-d10 (surr)	54.9		37-78		%	1		08/12/20 18:23
Fluoranthene-d10 (surr)	67.1		24-116		%	1		08/12/20 18:23

Batch Information

Analytical Batch: XMS12186
Analytical Method: 8270D SIM LV (PAH)
Analyst: DSD
Analytical Date/Time: 08/12/20 18:23
Container ID: 1203895003-C

Prep Batch: XXX43592
Prep Method: SW3535A
Prep Date/Time: 08/07/20 11:30
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

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Results of **103880-MW12**

Client Sample ID: **103880-MW12**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895003
Lab Project ID: 1203895

Collection Date: 08/03/20 14:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.275	J	0.577	0.173	mg/L	1		08/17/20 16:46
Surrogates								
5a Androstane (surr)	82.7		50-150		%	1		08/17/20 16:46

Batch Information

Analytical Batch: XFC15691
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/17/20 16:46
Container ID: 1203895003-A

Prep Batch: XXX43595
Prep Method: SW3520C
Prep Date/Time: 08/07/20 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Results of **103880-MW12**

Client Sample ID: **103880-MW12**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895003
Lab Project ID: 1203895

Collection Date: 08/03/20 14:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0310	mg/L	1		08/07/20 18:09
Surrogates								
4-Bromofluorobenzene (surr)	96.6		50-150		%	1		08/07/20 18:09

Batch Information

Analytical Batch: VFC15272
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 18:09
Container ID: 1203895003-E

Prep Batch: VXX36088
Prep Method: SW5030B
Prep Date/Time: 08/07/20 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-MW12**

Client Sample ID: **103880-MW12**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895003
Lab Project ID: 1203895

Collection Date: 08/03/20 14:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/20 19:07
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:07
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/20 19:07
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,2-Dichloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:07
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:07
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:07
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/20 19:07
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
Bromomethane	2.50	U	5.00	2.00	ug/L	1		08/05/20 19:07
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:07
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:07
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:07

Print Date: 08/21/2020 11:15:11AM

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Results of **103880-MW12**

Client Sample ID: **103880-MW12**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895003
Lab Project ID: 1203895

Collection Date: 08/03/20 14:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/20 19:07
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/20 19:07
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Dichlorodifluoromethane	1.19		1.00	0.310	ug/L	1		08/05/20 19:07
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:07
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:07
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:07
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/20 19:07
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:07
Trichlorofluoromethane	0.683 J		1.00	0.310	ug/L	1		08/05/20 19:07
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:07
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/20 19:07
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/20 19:07
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		08/05/20 19:07
4-Bromofluorobenzene (surr)	103		85-114		%	1		08/05/20 19:07
Toluene-d8 (surr)	101		89-112		%	1		08/05/20 19:07

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J flagging is activated

Results of **103880-MW12**

Client Sample ID: **103880-MW12**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895003
Lab Project ID: 1203895

Collection Date: 08/03/20 14:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20164
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 08/05/20 19:07
Container ID: 1203895003-H

Prep Batch: VXX36056
Prep Method: SW5030B
Prep Date/Time: 08/05/20 13:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-MW3**

Client Sample ID: **103880-MW3**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895004
Lab Project ID: 1203895

Collection Date: 08/03/20 17:25
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Polynuclear Aromatics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1-Methylnaphthalene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
2-Methylnaphthalene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Acenaphthene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Acenaphthylene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Anthracene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Benzo(a)Anthracene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Benzo[a]pyrene	0.00985	U	0.0197	0.00610	ug/L	1		08/12/20 18:44
Benzo[b]Fluoranthene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Benzo[g,h,i]perylene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Benzo[k]fluoranthene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Chrysene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Dibenzo[a,h]anthracene	0.00985	U	0.0197	0.00610	ug/L	1		08/12/20 18:44
Fluoranthene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Fluorene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Indeno[1,2,3-c,d] pyrene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Naphthalene	0.0492	U	0.0984	0.0305	ug/L	1		08/12/20 18:44
Phenanthrene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Pyrene	0.0246	U	0.0492	0.0148	ug/L	1		08/12/20 18:44
Surrogates								
2-Methylnaphthalene-d10 (surr)	41.7		37-78		%	1		08/12/20 18:44
Fluoranthene-d10 (surr)	41.2		24-116		%	1		08/12/20 18:44

Batch Information

Analytical Batch: XMS12186
Analytical Method: 8270D SIM LV (PAH)
Analyst: DSD
Analytical Date/Time: 08/12/20 18:44
Container ID: 1203895004-C

Prep Batch: XXX43592
Prep Method: SW3535A
Prep Date/Time: 08/07/20 11:30
Prep Initial Wt./Vol.: 254 mL
Prep Extract Vol: 1 mL

Print Date: 08/21/2020 11:15:11AM

J flagging is activated

Results of **103880-MW3**

Client Sample ID: **103880-MW3**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895004
Lab Project ID: 1203895

Collection Date: 08/03/20 17:25
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.388	J	0.600	0.180	mg/L	1		08/17/20 16:56
Surrogates								
5a Androstane (surr)	87.7		50-150		%	1		08/17/20 16:56

Batch Information

Analytical Batch: XFC15691
Analytical Method: AK102
Analyst: CDM
Analytical Date/Time: 08/17/20 16:56
Container ID: 1203895004-A

Prep Batch: XXX43595
Prep Method: SW3520C
Prep Date/Time: 08/07/20 15:58
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Results of **103880-MW3**

Client Sample ID: **103880-MW3**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895004
Lab Project ID: 1203895

Collection Date: 08/03/20 17:25
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0310	mg/L	1		08/07/20 18:27
Surrogates								
4-Bromofluorobenzene (surr)	96.5		50-150		%	1		08/07/20 18:27

Batch Information

Analytical Batch: VFC15272
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 18:27
Container ID: 1203895004-E

Prep Batch: VXX36088
Prep Method: SW5030B
Prep Date/Time: 08/07/20 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-MW3**

Client Sample ID: **103880-MW3**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895004
Lab Project ID: 1203895

Collection Date: 08/03/20 17:25
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/20 19:21
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:21
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/20 19:21
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,2-Dichloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:21
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:21
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:21
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/20 19:21
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
Bromomethane	2.50	U	5.00	2.00	ug/L	1		08/05/20 19:21
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/20 19:21
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 19:21
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 19:21

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Results of **103880-MW3**

Client Sample ID: **103880-MW3**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895004
Lab Project ID: 1203895

Collection Date: 08/03/20 17:25
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/20 19:21
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/20 19:21
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Dichlorodifluoromethane	1.91		1.00	0.310	ug/L	1		08/05/20 19:21
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:21
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:21
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:21
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/20 19:21
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Tetrachloroethene	0.864 J		1.00	0.310	ug/L	1		08/05/20 19:21
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 19:21
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/20 19:21
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/20 19:21
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/20 19:21
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		08/05/20 19:21
4-Bromofluorobenzene (surr)	103		85-114		%	1		08/05/20 19:21
Toluene-d8 (surr)	101		89-112		%	1		08/05/20 19:21

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J flagging is activated

Results of **103880-MW3**

Client Sample ID: **103880-MW3**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895004
Lab Project ID: 1203895

Collection Date: 08/03/20 17:25
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20164
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 08/05/20 19:21
Container ID: 1203895004-H

Prep Batch: VXX36056
Prep Method: SW5030B
Prep Date/Time: 08/05/20 13:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-WTB**

Client Sample ID: **103880-WTB**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895005
Lab Project ID: 1203895

Collection Date: 08/03/20 09:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0310	mg/L	1		08/07/20 16:36
Surrogates								
4-Bromofluorobenzene (surr)	92.9		50-150		%	1		08/07/20 16:36

Batch Information

Analytical Batch: VFC15272
Analytical Method: AK101
Analyst: ALJ
Analytical Date/Time: 08/07/20 16:36
Container ID: 1203895005-A

Prep Batch: VXX36088
Prep Method: SW5030B
Prep Date/Time: 08/07/20 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **103880-WTB**

Client Sample ID: **103880-WTB**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895005
Lab Project ID: 1203895

Collection Date: 08/03/20 09:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/20 17:53
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/20 17:53
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/20 17:53
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,2-Dichloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 17:53
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/20 17:53
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/20 17:53
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/20 17:53
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
Bromomethane	2.50	U	5.00	2.00	ug/L	1		08/05/20 17:53
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/20 17:53
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/20 17:53
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/20 17:53

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Results of **103880-WTB**

Client Sample ID: **103880-WTB**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895005
Lab Project ID: 1203895

Collection Date: 08/03/20 09:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/20 17:53
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/20 17:53
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/20 17:53
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/20 17:53
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/20 17:53
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/20 17:53
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/20 17:53
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/20 17:53
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/20 17:53
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/20 17:53
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		08/05/20 17:53
4-Bromofluorobenzene (surr)	104		85-114		%	1		08/05/20 17:53
Toluene-d8 (surr)	101		89-112		%	1		08/05/20 17:53

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Results of **103880-WTB**

Client Sample ID: **103880-WTB**
Client Project ID: **103880 HolidayStationStore#611**
Lab Sample ID: 1203895005
Lab Project ID: 1203895

Collection Date: 08/03/20 09:00
Received Date: 08/04/20 12:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS20164
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 08/05/20 17:53
Container ID: 1203895005-A

Prep Batch: VXX36056
Prep Method: SW5030B
Prep Date/Time: 08/05/20 13:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Method Blank

Blank ID: MB for HBN 1809917 [VXX/36056]
Blank Lab ID: 1573115

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895001, 1203895002, 1203895003, 1203895004, 1203895005

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.150	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	2.50U	5.00	2.00	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

Method Blank

Blank ID: MB for HBN 1809917 [VXX/36056]
Blank Lab ID: 1573115

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895001, 1203895002, 1203895003, 1203895004, 1203895005

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Chloromethane	0.500U	1.00	0.310	ug/L
cis-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
cis-1,3-Dichloropropene	0.250U	0.500	0.150	ug/L
Dibromochloromethane	0.250U	0.500	0.150	ug/L
Dibromomethane	0.500U	1.00	0.310	ug/L
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Freon-113	5.00U	10.0	3.10	ug/L
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L
Methylene chloride	5.00U	10.0	3.10	ug/L
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Butylbenzene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
sec-Butylbenzene	0.500U	1.00	0.310	ug/L
Styrene	0.500U	1.00	0.310	ug/L
tert-Butylbenzene	0.500U	1.00	0.310	ug/L
Tetrachloroethene	0.500U	1.00	0.310	ug/L
Toluene	0.500U	1.00	0.310	ug/L
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L
Trichloroethene	0.500U	1.00	0.310	ug/L
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L
Vinyl acetate	5.00U	10.0	3.10	ug/L
Vinyl chloride	0.0750U	0.150	0.0500	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	106	81-118		%
4-Bromofluorobenzene (surr)	105	85-114		%
Toluene-d8 (surr)	101	89-112		%

Method Blank

Blank ID: MB for HBN 1809917 [VXX/36056]
Blank Lab ID: 1573115

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895001, 1203895002, 1203895003, 1203895004, 1203895005

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units

Batch Information

Analytical Batch: VMS20164
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: NRB
Analytical Date/Time: 8/5/2020 2:08:00PM

Prep Batch: VXX36056
Prep Method: SW5030B
Prep Date/Time: 8/5/2020 1:00:00PM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [VXX36056]
Blank Spike Lab ID: 1573116
Date Analyzed: 08/05/2020 14:27

Spike Duplicate ID: LCSD for HBN 1203895 [VXX36056]
Spike Duplicate Lab ID: 1573117
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895001, 1203895002, 1203895003, 1203895004, 1203895005

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	30	30.1	100	30	30.6	102	(78-124)	1.50	(< 20)
1,1,1-Trichloroethane	30	30.5	102	30	29.0	97	(74-131)	5.20	(< 20)
1,1,2,2-Tetrachloroethane	30	28.5	95	30	30.0	100	(71-121)	5.50	(< 20)
1,1,2-Trichloroethane	30	28.8	96	30	30.2	101	(80-119)	4.70	(< 20)
1,1-Dichloroethane	30	28.8	96	30	27.9	93	(77-125)	3.20	(< 20)
1,1-Dichloroethene	30	29.7	99	30	29.0	97	(71-131)	2.40	(< 20)
1,1-Dichloropropene	30	30.2	101	30	29.0	97	(79-125)	4.20	(< 20)
1,2,3-Trichlorobenzene	30	29.8	99	30	33.2	111	(69-129)	10.80	(< 20)
1,2,3-Trichloropropane	30	28.6	95	30	29.9	100	(73-122)	4.50	(< 20)
1,2,4-Trichlorobenzene	30	30.8	103	30	33.1	110	(69-130)	7.20	(< 20)
1,2,4-Trimethylbenzene	30	27.7	93	30	28.8	96	(79-124)	3.60	(< 20)
1,2-Dibromo-3-chloropropane	30	28.2	94	30	30.8	103	(62-128)	9.10	(< 20)
1,2-Dibromoethane	30	28.9	96	30	30.6	102	(77-121)	5.70	(< 20)
1,2-Dichlorobenzene	30	29.3	98	30	30.0	100	(80-119)	2.20	(< 20)
1,2-Dichloroethane	30	29.3	98	30	28.5	95	(73-128)	2.70	(< 20)
1,2-Dichloropropane	30	30.4	101	30	29.7	99	(78-122)	2.30	(< 20)
1,3,5-Trimethylbenzene	30	28.8	96	30	29.4	98	(75-124)	2.10	(< 20)
1,3-Dichlorobenzene	30	30.5	102	30	30.7	102	(80-119)	0.83	(< 20)
1,3-Dichloropropane	30	28.7	96	30	29.8	99	(80-119)	3.70	(< 20)
1,4-Dichlorobenzene	30	29.9	100	30	30.3	101	(79-118)	1.40	(< 20)
2,2-Dichloropropane	30	31.6	105	30	30.2	101	(60-139)	4.50	(< 20)
2-Butanone (MEK)	90	95.8	106	90	104	115	(56-143)	8.10	(< 20)
2-Chlorotoluene	30	29.6	99	30	30.5	102	(79-122)	3.10	(< 20)
2-Hexanone	90	85.3	95	90	92.3	103	(57-139)	7.90	(< 20)
4-Chlorotoluene	30	30.0	100	30	30.1	100	(78-122)	0.33	(< 20)
4-Isopropyltoluene	30	29.4	98	30	30.0	100	(77-127)	2.00	(< 20)
4-Methyl-2-pentanone (MIBK)	90	89.7	100	90	92.5	103	(67-130)	3.00	(< 20)
Benzene	30	29.8	99	30	29.1	97	(79-120)	2.20	(< 20)
Bromobenzene	30	29.2	97	30	30.0	100	(80-120)	2.60	(< 20)
Bromochloromethane	30	30.4	101	30	29.9	100	(78-123)	1.60	(< 20)
Bromodichloromethane	30	30.8	103	30	29.8	99	(79-125)	3.20	(< 20)
Bromoform	30	30.1	100	30	31.3	104	(66-130)	3.90	(< 20)
Bromomethane	30	30.6	102	30	29.7	99	(53-141)	3.10	(< 20)
Carbon disulfide	45	44.7	99	45	43.2	96	(64-133)	3.30	(< 20)

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [VXX36056]
Blank Spike Lab ID: 1573116
Date Analyzed: 08/05/2020 14:27

Spike Duplicate ID: LCSD for HBN 1203895 [VXX36056]
Spike Duplicate Lab ID: 1573117
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895001, 1203895002, 1203895003, 1203895004, 1203895005

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Carbon tetrachloride	30	30.6	102	30	29.1	97	(72-136)	5.30	(< 20)
Chlorobenzene	30	28.6	95	30	28.2	94	(82-118)	1.30	(< 20)
Chloroethane	30	25.7	86	30	29.0	97	(60-138)	12.10	(< 20)
Chloroform	30	29.6	99	30	28.6	95	(79-124)	3.40	(< 20)
Chloromethane	30	28.1	94	30	26.4	88	(50-139)	6.30	(< 20)
cis-1,2-Dichloroethene	30	29.7	99	30	29.1	97	(78-123)	2.30	(< 20)
cis-1,3-Dichloropropene	30	31.3	104	30	30.6	102	(75-124)	2.30	(< 20)
Dibromochloromethane	30	29.6	99	30	30.6	102	(74-126)	3.40	(< 20)
Dibromomethane	30	30.5	102	30	30.1	100	(79-123)	1.10	(< 20)
Dichlorodifluoromethane	30	24.7	83	30	21.9	73	(32-152)	12.00	(< 20)
Ethylbenzene	30	31.2	104	30	30.5	102	(79-121)	2.20	(< 20)
Freon-113	45	44.9	100	45	43.9	98	(70-136)	2.30	(< 20)
Hexachlorobutadiene	30	33.9	113	30	34.2	114	(66-134)	1.00	(< 20)
Isopropylbenzene (Cumene)	30	31.0	103	30	30.4	101	(72-131)	2.00	(< 20)
Methylene chloride	30	29.1	97	30	28.5	95	(74-124)	2.30	(< 20)
Methyl-t-butyl ether	45	44.2	98	45	45.3	101	(71-124)	2.60	(< 20)
Naphthalene	30	26.5	88	30	31.5	105	(61-128)	17.10	(< 20)
n-Butylbenzene	30	29.5	99	30	30.2	101	(75-128)	2.10	(< 20)
n-Propylbenzene	30	30.9	103	30	31.0	103	(76-126)	0.54	(< 20)
o-Xylene	30	30.6	102	30	31.4	105	(78-122)	2.50	(< 20)
P & M -Xylene	60	59.8	100	60	60.0	100	(80-121)	0.23	(< 20)
sec-Butylbenzene	30	31.5	105	30	31.5	105	(77-126)	0.16	(< 20)
Styrene	30	27.8	93	30	28.9	96	(78-123)	3.90	(< 20)
tert-Butylbenzene	30	30.4	101	30	30.5	102	(78-124)	0.16	(< 20)
Tetrachloroethene	30	29.7	99	30	29.9	100	(74-129)	0.72	(< 20)
Toluene	30	28.4	95	30	28.2	94	(80-121)	0.70	(< 20)
trans-1,2-Dichloroethene	30	29.0	97	30	28.1	94	(75-124)	3.40	(< 20)
trans-1,3-Dichloropropene	30	30.2	101	30	31.4	105	(73-127)	4.00	(< 20)
Trichloroethene	30	30.6	102	30	29.6	99	(79-123)	3.50	(< 20)
Trichlorofluoromethane	30	26.8	89	30	30.0	100	(65-141)	11.20	(< 20)
Vinyl acetate	30	33.3	111	30	34.6	115	(54-146)	4.00	(< 20)
Vinyl chloride	30	32.2	107	30	29.0	97	(58-137)	10.30	(< 20)
Xylenes (total)	90	90.4	100	90	91.3	101	(79-121)	1.00	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [VXX36056]
Blank Spike Lab ID: 1573116
Date Analyzed: 08/05/2020 14:27

Spike Duplicate ID: LCSD for HBN 1203895 [VXX36056]
Spike Duplicate Lab ID: 1573117
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895001, 1203895002, 1203895003, 1203895004, 1203895005

Results by **SW8260D**

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-D4 (surr)	30	102	102	30	99.2	99	(81-118)	2.90	
4-Bromofluorobenzene (surr)	30	97.8	98	30	97.4	97	(85-114)	0.43	
Toluene-d8 (surr)	30	97.8	98	30	99	99	(89-112)	1.20	

Batch Information

Analytical Batch: **VMS20164**
Analytical Method: **SW8260D**
Instrument: **Agilent 7890-75MS**
Analyst: **NRB**

Prep Batch: **VXX36056**
Prep Method: **SW5030B**
Prep Date/Time: **08/05/2020 13:00**
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1810088 [VXX/36088]
Blank Lab ID: 1573794

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895002, 1203895003, 1203895004, 1203895005

Results by **AK101**

Parameter	Results	LOQ/CL	DL	Units
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L
Surrogates				
4-Bromofluorobenzene (surr)	97.6	50-150		%

Batch Information

Analytical Batch: VFC15272
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/7/2020 1:52:00PM

Prep Batch: VXX36088
Prep Method: SW5030B
Prep Date/Time: 8/7/2020 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [VXX36088]
Blank Spike Lab ID: 1573797
Date Analyzed: 08/07/2020 14:46

Spike Duplicate ID: LCSD for HBN 1203895 [VXX36088]
Spike Duplicate Lab ID: 1573798
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895002, 1203895003, 1203895004, 1203895005

Results by **AK101**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	1.00	1.06	106	1.00	1.04	104	(60-120)	2.40	(< 20)

Batch Information

Analytical Batch: **VFC15272**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36088**
Prep Method: **SW5030B**
Prep Date/Time: **08/07/2020 06:00**
Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1810257 [VXX/36109]
Blank Lab ID: 1574478

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895001

Results by **AK101**

Parameter	Results	LOQ/CL	DL	Units
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L
Surrogates				
4-Bromofluorobenzene (surr)	79.4	50-150		%

Batch Information

Analytical Batch: VFC15280
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: ALJ
Analytical Date/Time: 8/12/2020 12:08:00PM

Prep Batch: VXX36109
Prep Method: SW5030B
Prep Date/Time: 8/12/2020 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [VXX36109]
Blank Spike Lab ID: 1574479
Date Analyzed: 08/12/2020 13:02

Spike Duplicate ID: LCSD for HBN 1203895 [VXX36109]
Spike Duplicate Lab ID: 1574480
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895001

Results by **AK101**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	1.00	0.999	100	1.00	1.07	107	(60-120)	7.30	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500	87.4	87	0.0500	87.9	88	(50-150)	0.59	

Batch Information

Analytical Batch: **VFC15280**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **ALJ**

Prep Batch: **VXX36109**
Prep Method: **SW5030B**
Prep Date/Time: **08/12/2020 06:00**
Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1809943 [XXX/43592]
Blank Lab ID: 1573209

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895001, 1203895002, 1203895003, 1203895004

Results by **8270D SIM LV (PAH)**

Parameter	Results	LOQ/CL	DL	Units
1-Methylnaphthalene	0.0250U	0.0500	0.0150	ug/L
2-Methylnaphthalene	0.0250U	0.0500	0.0150	ug/L
Acenaphthene	0.0250U	0.0500	0.0150	ug/L
Acenaphthylene	0.0250U	0.0500	0.0150	ug/L
Anthracene	0.0250U	0.0500	0.0150	ug/L
Benzo(a)Anthracene	0.0250U	0.0500	0.0150	ug/L
Benzo[a]pyrene	0.0100U	0.0200	0.00620	ug/L
Benzo[b]Fluoranthene	0.0250U	0.0500	0.0150	ug/L
Benzo[g,h,i]perylene	0.0250U	0.0500	0.0150	ug/L
Benzo[k]fluoranthene	0.0250U	0.0500	0.0150	ug/L
Chrysene	0.0250U	0.0500	0.0150	ug/L
Dibenzo[a,h]anthracene	0.0100U	0.0200	0.00620	ug/L
Fluoranthene	0.0250U	0.0500	0.0150	ug/L
Fluorene	0.0250U	0.0500	0.0150	ug/L
Indeno[1,2,3-c,d] pyrene	0.0250U	0.0500	0.0150	ug/L
Naphthalene	0.0500U	0.100	0.0310	ug/L
Phenanthrene	0.0250U	0.0500	0.0150	ug/L
Pyrene	0.0250U	0.0500	0.0150	ug/L
Surrogates				
2-Methylnaphthalene-d10 (surr)	39.1	37-78		%
Fluoranthene-d10 (surr)	57.1	24-116		%

Batch Information

Analytical Batch: XMS12186
Analytical Method: 8270D SIM LV (PAH)
Instrument: Agilent GC 7890B/5977A SWA
Analyst: DSD
Analytical Date/Time: 8/12/2020 3:18:00PM

Prep Batch: XXX43592
Prep Method: SW3535A
Prep Date/Time: 8/7/2020 11:30:32AM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [XXX43592]
Blank Spike Lab ID: 1573210
Date Analyzed: 08/12/2020 15:39

Spike Duplicate ID: LCSD for HBN 1203895 [XXX43592]
Spike Duplicate Lab ID: 1573211
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895001, 1203895002, 1203895003, 1203895004

Results by **8270D SIM LV (PAH)**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1-Methylnaphthalene	2	0.946	47	2	1.04	52	(41-115)	9.70	(< 20)
2-Methylnaphthalene	2	0.931	47	2	1.03	51	(39-114)	9.70	(< 20)
Acenaphthene	2	1.10	55	2	1.16	58	(48-114)	5.50	(< 20)
Acenaphthylene	2	1.11	56	2	1.18	59	(35-121)	6.00	(< 20)
Anthracene	2	1.37	68	2	1.30	65	(53-119)	4.80	(< 20)
Benzo(a)Anthracene	2	1.35	68	2	1.31	66	(59-120)	3.10	(< 20)
Benzo[a]pyrene	2	1.71	86	2	1.66	83	(53-120)	3.20	(< 20)
Benzo[b]Fluoranthene	2	1.65	83	2	1.57	79	(53-126)	5.00	(< 20)
Benzo[g,h,i]perylene	2	1.80	90	2	1.75	88	(44-128)	2.80	(< 20)
Benzo[k]fluoranthene	2	1.69	85	2	1.65	83	(54-125)	2.60	(< 20)
Chrysene	2	1.59	79	2	1.55	78	(57-120)	2.40	(< 20)
Dibenzo[a,h]anthracene	2	1.79	90	2	1.76	88	(44-131)	1.80	(< 20)
Fluoranthene	2	1.39	69	2	1.33	66	(58-120)	4.50	(< 20)
Fluorene	2	1.21	60	2	1.23	61	(50-118)	1.40	(< 20)
Indeno[1,2,3-c,d] pyrene	2	1.86	93	2	1.83	91	(48-130)	2.00	(< 20)
Naphthalene	2	0.948	47	2	1.04	52	(43-114)	9.50	(< 20)
Phenanthrene	2	1.34	67	2	1.29	64	(53-115)	3.90	(< 20)
Pyrene	2	1.40	70	2	1.33	67	(53-121)	4.60	(< 20)
Surrogates									
2-Methylnaphthalene-d10 (surr)	2	40.6	41	2	46	46	(37-78)	12.50	
Fluoranthene-d10 (surr)	2	60.9	61	2	60.3	60	(24-116)	1.00	

Batch Information

Analytical Batch: **XMS12186**
Analytical Method: **8270D SIM LV (PAH)**
Instrument: **Agilent GC 7890B/5977A SWA**
Analyst: **DSD**

Prep Batch: **XXX43592**
Prep Method: **SW3535A**
Prep Date/Time: **08/07/2020 11:30**
Spike Init Wt./Vol.: 2 ug/L Extract Vol: 1 mL
Dupe Init Wt./Vol.: 2 ug/L Extract Vol: 1 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1809982 [XXX/43595]
Blank Lab ID: 1573438

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203895001, 1203895002, 1203895003, 1203895004

Results by **AK102**

Parameter	Results	LOQ/CL	DL	Units
Diesel Range Organics	0.300U	0.600	0.180	mg/L
Surrogates				
5a Androstane (surr)	88	60-120		%

Batch Information

Analytical Batch: XFC15691
Analytical Method: AK102
Instrument: Agilent 7890B R
Analyst: CDM
Analytical Date/Time: 8/17/2020 1:06:00PM

Prep Batch: XXX43595
Prep Method: SW3520C
Prep Date/Time: 8/7/2020 3:58:10PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203895 [XXX43595]
Blank Spike Lab ID: 1573439
Date Analyzed: 08/17/2020 13:16

Spike Duplicate ID: LCSD for HBN 1203895 [XXX43595]
Spike Duplicate Lab ID: 1573440
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203895001, 1203895002, 1203895003, 1203895004

Results by **AK102**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range Organics	20	18.4	92	20	19.7	98	(75-125)	6.90	(< 20)
Surrogates									
5a Androstane (surr)	0.4	101	101	0.4	114	114	(60-120)	12.00	

Batch Information

Analytical Batch: **XFC15691**
Analytical Method: **AK102**
Instrument: **Agilent 7890B R**
Analyst: **CDM**

Prep Batch: **XXX43595**
Prep Method: **SW3520C**
Prep Date/Time: **08/07/2020 15:58**
Spike Init Wt./Vol.: 20 mg/L Extract Vol: 1 mL
Dupe Init Wt./Vol.: 20 mg/L Extract Vol: 1 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Shannon & Wilson, Inc.
5430 Fairbanks Street, Suite 3
Anchorage, Alaska 99518
(907) 561-2120
Fax (206) 695-6777

SGS North America Inc.

1203895

Date	Time	Sample ID	Total Containers	GRO- AK101	DRO-AK102	VOCs-EPA 8260D	PAHs- EPA 8270D SIM				
				HCl	HCl	HCl	4C				
8/3/2020	13:30	(1AJ) 103880-MW1	10	X	X	X	X				
8/3/2020	13:30	(2AJ) 103880-MW2	10	X	X	X	X				
8/3/2020	14:00	(3AJ) 103880-MW12	10	X	X	X	X				
8/3/2020	17:25	(4AJ) 103880-MW3	10	X	X	X	X				
8/3/2020	9:00	(5AC) 103880-WTB	1 Box	X		X					
						X					

Relinquished By:	Relinquished By:	Project Information
Signature: Alec Rizzo	Signature:	Project Number: 103880
Print Name: Alec Rizzo	Print Name:	Project Name: Holiday Station Store #611
Company: Shannon & Wilson, Inc.	Company:	Contact: Dan McMahon/ Alec Rizzo
Date: 8/4/20	Date:	Sampler: AJR
Time: 1155	Time:	Special Instructions: Profit # ~~3654~~ 365300 QM
Received By:	**Received By:**	**Sample Receipt**
Signature:	Signature:	Shipped Via: Hand Delivered
Print Name:	Print Name:	Absent
Company:	Company: SGS	Cooler Temperature Upon Arrival: 1.8 D50
Date:	Date: 8/4/20	Sample Matrix: Groundwater
Time:	Time: 1200	**10 Working DAY TAT, Terrabase TF3 File Format**

e-Sample Receipt Form

SGS Workorder #: **1203895**

1 2 0 3 8 9 5

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		Yes — Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	absent
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
	N/A	**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 1.8 °C Therm. ID: D50
		Cooler ID: @ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
	N/A	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	N/A	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	Yes	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	Yes	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1203895001-A	HCL to pH < 2	OK			
1203895001-B	HCL to pH < 2	OK			
1203895001-C	No Preservative Required	OK			
1203895001-D	No Preservative Required	OK			
1203895001-E	HCL to pH < 2	OK			
1203895001-F	HCL to pH < 2	OK			
1203895001-G	HCL to pH < 2	OK			
1203895001-H	HCL to pH < 2	OK			
1203895001-I	HCL to pH < 2	OK			
1203895001-J	HCL to pH < 2	OK			
1203895002-A	HCL to pH < 2	OK			
1203895002-B	HCL to pH < 2	OK			
1203895002-C	No Preservative Required	OK			
1203895002-D	No Preservative Required	OK			
1203895002-E	HCL to pH < 2	OK			
1203895002-F	HCL to pH < 2	OK			
1203895002-G	HCL to pH < 2	OK			
1203895002-H	HCL to pH < 2	OK			
1203895002-I	HCL to pH < 2	OK			
1203895002-J	HCL to pH < 2	OK			
1203895003-A	HCL to pH < 2	OK			
1203895003-B	HCL to pH < 2	OK			
1203895003-C	No Preservative Required	OK			
1203895003-D	No Preservative Required	OK			
1203895003-E	HCL to pH < 2	OK			
1203895003-F	HCL to pH < 2	OK			
1203895003-G	HCL to pH < 2	OK			
1203895003-H	HCL to pH < 2	OK			
1203895003-I	HCL to pH < 2	OK			
1203895003-J	HCL to pH < 2	OK			
1203895004-A	HCL to pH < 2	OK			
1203895004-B	HCL to pH < 2	OK			
1203895004-C	No Preservative Required	OK			
1203895004-D	No Preservative Required	OK			
1203895004-E	HCL to pH < 2	OK			
1203895004-F	HCL to pH < 2	OK			
1203895004-G	HCL to pH < 2	OK			
1203895004-H	HCL to pH < 2	OK			
1203895004-I	HCL to pH < 2	OK			
1203895004-J	HCL to pH < 2	OK			
1203895005-A	HCL to pH < 2	OK			
1203895005-B	HCL to pH < 2	OK			
1203895005-C	HCL to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
QN - Insufficient sample quantity provided.

LABORATORY DATA REVIEW CHECKLIST

Completed by: Alec Rizzo
Title: Holiday Station Store #611
Date: 8/24/2020

Consultant Firm: Shannon & Wilson, Inc.

Laboratory Name: SGS North America Inc.
Laboratory Report Number: 1203895
Laboratory Report Date: 8/21/2020

Contaminated Site Name: Holiday Station Store #611 Dispensers
ADEC File Number: 2100.26.623
Hazard Identification Number: 27225

(**NOTE**: ***NA*** = not applicable; Text in *italics* added by Shannon & Wilson, Inc.)

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses? **Yes / No / NA**
Comments:

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
Yes / No / NA
Comments: *The samples were not transferred to another "network" laboratory or sub-contracted to an alternate laboratory.*

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?
Yes / No / NA
Comments**:**

b. Correct analyses requested? **Yes / No / NA**
Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
Yes / No / NA
Comments: *The cooler temperature blank was 1.8° Celsius.*

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, VOCs, etc.)? **Yes / No / NA**
Comments:

c. Sample condition documented - broken, leaking (MeOH), zero headspace (VOC vials)? **Yes / No / NA**
Comments:

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.? **Yes / No / NA**
Comments: *No discrepancies were noted.*

e. Data quality or usability affected?
Comments: *Data quality/usability considered unaffected; see above.*

4. Case Narrative

a. Present and understandable? **Yes / No / NA**
Comments:

b. Discrepancies, errors or QC failures noted by the lab? **Yes / No / NA**
Comments:

c. Were all corrective actions documented? **Yes / No / NA**
Comments:

d. What is the effect on data quality/usability, according to the case narrative?
Comments: *The case narrative does not discuss data quality/usability.*

5. Sample Results

a. Correct analyses performed/reported as requested on COC? **Yes / No / NA**
Comments:

b. All applicable holding times met? **Yes / No / NA**
Comments:

c. All soils reported on a dry weight basis? **Yes / No / NA**
Comments:

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project? **Yes / No / NA**
Comments*: The LOQ for 1,2,3-trichloropropane exceeds the ADEC cleanup level.*

e. Data quality or usability affected?
Comments: *There is a potential that the target analyte is present at concentrations greater than the ADEC cleanup level, but less than the LOQ; however, the analyte was not detected at estimated concentrations in the project samples.*

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis, and 20 samples?
Yes / No / NA
Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?
Yes / No / NA
Comments:

iii. If above LOQ or project specified objectives, what samples are affected?
Comments:

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes / No / NA
Comments:

v. Data quality or usability affected?
Comments: *See above.*

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis, and 20 samples?
(LCS/LCSD required per AK methods, LCS required per SW846) **Yes / No / NA**
Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples? **Yes / No / NA**
Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable. (AK petroleum methods: AK 101 60%-120%, AK 102 75%-125%, AK 103 60%-120%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments:

iv. Precision – All relative percent differences (RPDs) reported and less than method or laboratory limits and project specified objectives, if applicable. RPD reported from LCS/LCSD, and/or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments:

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?
Yes / No / NA
Comments:

vii. Data quality or usability affected?
Comments*: No, see above.*

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis, and 20 samples?
Yes / No / NA
Comments:

ii. Metals/Inorganics - One MS and one MSD reported per matrix, analysis and 20 samples? **Yes / No / NA**
Comments:

iii. Accuracy – All percent recoveries (%R) reported and *w*ithin method or laboratory limits and project specified objectives, if applicable. (AK petroleum methods: AK 101 60%-120%, AK 102 75%-125%, AK 103 60%-120%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments:

iv. Precision – All relative percent differences (RPDs) reported and less than method or laboratory limits and project specified objectives, if applicable. RPD reported from MS/MSD, and/or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages) **Yes / No / NA**
Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments:

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?
Yes / No / NA
Comments: *No, see above.*

vii. Data quality or usability affected?
Comments*: No, see above.*

d. Surrogates - Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses - field, QC, and laboratory samples? **Yes / No / NA**
Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages) **Yes / No / NA**
Comments:

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined? **Yes / No / NA**
Comments:

iv. Data quality or usability affected?
Comments: *No, see above.*

e. Trip Blank - Volatile analyses only (GRO, BTEX, VOCs, etc.)

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? **Yes / No / NA**
Comments:

ii. Is the cooler used to transport the trip blank and volatile samples clearly indicated on the COC? **Yes / No / NA**
Comments: *Only one cooler was used to transport the samples.*

iii. All results less than LOQ and project specified objectives? **Yes / No / NA**
Comments*:*

iv. If above LOQ or project specified DQOs, what samples are affected?
Comments:

v. Data quality or usability affected?
Comments: *No, see above.*

f. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?
Yes / No / NA
Comments: *Duplicate sample MW12 (duplicate of MW2) was submitted to the laboratory.*

ii. Were the field duplicates submitted blind to the lab? **Yes / No / NA**
Comments*:*

iii. Precision – All relative percent differences (RPDs) less than specified project objectives? (Recommended: 30% for water, 50% for soil) **Yes / No / NA**
Comments:

iv. Data quality or usability affected?
Comments:

g. Decontamination or Equipment Blank (if not applicable, a comment stating why must be entered below)**.**
Yes / No / NA
Comments: *A decontamination blank was not included in our ADEC-approved workplan.*

i. All results less than LOQ and project specified objectives?
Yes / No / NA
Comments:

ii. If above LOQ or project specified objectives, what samples are affected?
Comments:

iii. Data quality or usability affected?
Comments:

7. <u>Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)</u>

a. Defined and appropriate? **Yes / No / NA**
Comments: *A key is provided on Page 3 of the SGS Laboratory Report.*

APPENDIX F

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL/ENVIRONMENTAL REPORT

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

Attachment to and part of Report 103880-011

Date: October 2020
To: Holiday Alaska, LLC

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL/ENVIRONMENTAL REPORT

CONSULTING SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

Consultants prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your consultant prepared your report expressly for you and expressly for the purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the consultant. No party should apply this report for any purpose other than that originally contemplated without first conferring with the consultant.

THE CONSULTANT'S REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

A geotechnical/environmental report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. Depending on the project, these may include: the general nature of the structure and property involved; its size and configuration; its historical use and practice; the location of the structure on the site and its orientation; other improvements such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask the consultant to evaluate how any factors that change subsequent to the date of the report may affect the recommendations. Unless your consultant indicates otherwise, your report should not be used: (1) when the nature of the proposed project is changed (for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one, or chemicals are discovered on or near the site); (2) when the size, elevation, or configuration of the proposed project is altered; (3) when the location or orientation of the proposed project is modified; (4) when there is a change of ownership; or (5) for application to an adjacent site. Consultants cannot accept responsibility for problems that may occur if they are not consulted after factors which were considered in the development of the report have changed.

SUBSURFACE CONDITIONS CAN CHANGE.

Subsurface conditions may be affected as a result of natural processes or human activity. Because a geotechnical/environmental report is based on conditions that existed at the time of subsurface exploration, construction decisions should not be based on a report whose adequacy may have been affected by time. Ask the consultant to advise if additional tests are desirable before construction starts; for example, groundwater conditions commonly vary seasonally.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes, or groundwater fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical/environmental report. The consultant should be kept apprised of any such events, and should be consulted to determine if additional tests are necessary.

MOST RECOMMENDATIONS ARE PROFESSIONAL JUDGMENTS.

Site exploration and testing identifies actual surface and subsurface conditions only at those points where samples are taken. The data were extrapolated by your consultant, who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your consultant can work together to help reduce their impacts. Retaining your consultant to observe subsurface construction operations can be particularly beneficial in this respect.

A REPORT'S CONCLUSIONS ARE PRELIMINARY.

The conclusions contained in your consultant's report are preliminary because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Actual subsurface conditions can be discerned only during earthwork; therefore, you should retain your consultant to observe actual conditions and to provide conclusions. Only the consultant who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations based on those conclusions are valid and whether or not the contractor is abiding by applicable recommendations. The consultant who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

THE CONSULTANT'S REPORT IS SUBJECT TO MISINTERPRETATION.

Costly problems can occur when other design professionals develop their plans based on misinterpretation of a geotechnical/environmental report. To help avoid these problems, the consultant should be retained to work with other project design professionals to explain relevant geotechnical, geological, hydrogeological, and environmental findings, and to review the adequacy of their plans and specifications relative to these issues.

BORING LOGS AND/OR MONITORING WELL DATA SHOULD NOT BE SEPARATED FROM THE REPORT.

Final boring logs developed by the consultant are based upon interpretation of field logs (assembled by site personnel), field test results, and laboratory and/or office evaluation of field samples and data. Only final boring logs and data are customarily included in geotechnical/environmental reports. These final logs should not, under any circumstances, be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process.

To reduce the likelihood of boring log or monitoring well misinterpretation, contractors should be given ready access to the complete geotechnical engineering/environmental report prepared or authorized for their use. If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared, and that developing construction cost estimates was not one of the specific purposes for which it was prepared. While a contractor may gain important knowledge from a report prepared for another party, the contractor should discuss the report with your consultant and perform the additional or alternative work believed necessary to obtain the data specifically appropriate for construction cost estimating purposes. Some clients hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes that aggravate them to a disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY.

Because geotechnical/environmental engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims being lodged against consultants. To help prevent this problem, consultants have developed a number of clauses for use in their contracts, reports, and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where the consultant's responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

The preceding paragraphs are based on information provided by the
ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland