

**Glennallen Fuel and Service
UST Closure and Site Assessment Report
Mile 186 Glenn Highway, Glennallen, Alaska
ADEC Facility ID 2292**



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ACRONYMS AND ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
AK	Alaska Method
bgs	Below Ground Surface
DRO	Diesel range organics
EDB	1,2-dibromoethane
EMI	Environmental Management, Inc.
FSG	ADEC Field Sample Guidance
GRO	Gasoline Range Organics
IDW	Investigative Derived waste
mg/kg	Milligrams per kilogram
µg/kg	Micrograms per kilogram
MTG	Migration to Groundwater Cleanup Level, 18 AAC 75
PAH	Polynuclear Aromatic hydrocarbons
PID	photoionization detector
PPE	Personal Protective Equipment
ppmv	Parts per million by volume
SGS	SGS North America, Inc.
UST	Underground Storage Tank
VOC	Volatile organic compounds

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1.0 INTRODUCTION

This report documents the site assessment and release investigation conducted by Environmental Management, Inc., (EMI) during and following the removal of one regulated underground storage tank (UST) from the Glennallen Fuel and Service gas station located at Mile 186 Glenn Highway, Glennallen, Alaska, 99588 (ADEC Facility ID: 2292). EMI performed the work described herein under contract with American Village of Alaska, Inc., the owner of the facility.

2.0 SITE DESCRIPTION AND BACKGROUND

Glennallen Fuel and Service is a gas station and auto mechanic shop. According to the Alaska Department of Environmental Conservation (ADEC) UST Database, the first registered UST at the site was installed in 1968, indicating the station has been in operation for at least 50 years. Over the years seven USTs have been installed at the site, two of which are currently in use (tanks 6 and 7), four have been previously removed in 1993 (tanks 1 – 4), and tank 5, which is the subject of this report.

Tank 5 was installed in 1991 and is a 10,000-gallon dual compartment UST that housed both gasoline and diesel. It was taken out of use, unofficially, sometime prior to 2013. In August 2013 an *Empty Tank Affidavit* was submitted to ADEC to put the tank in “tank out of service status”. On April 3, 2019, ADEC issued a letter stating the UST system had been determined to be substandard and was therefore required to be permanently closed via removal.

ADEC lists two leaking UST events on the UST Database; however, only limited information related to these events are available on the database. These events are ADEC File No. 240.26.001 which was given a “cleanup complete” determination on October 21, 1993, and ADEC File No. 23199 which was given “cleanup complete” status on September 4, 1992.

There is an active contaminated site on the property (ADEC File No. 240.38.017) which is the result of release from a heating oil UST in 2018. The location the release is approximately 100 feet southeast of Tank 5.

3.0 METHODOLOGY

Field activities were conducted in general accordance with UST Regulations (18 AAC 78, July 1, 2017), and the August 2017 *ADEC Field Sampling Guidance* (FSG). Further details on the field screening methods, soil sampling methods, and laboratory analysis are provided below.

3.1 Field Screening Methods

EMI conducted field screening during and following the decommissioning activities, including screening of the excavation base and piping in accordance with the *UST Procedures Manual*, and FSG, as applicable. See Figure 2 for headspace sample locations. Headspace samples were collected by filling re-sealable quart size bags approximately 1/3 to 1/2 full with soil. The bags were then agitated before being allowed to develop for at least 10 minutes, but not longer than an hour. During this time the soils were warmed to a minimum temperature of 40°F. After the samples have been warmed and allowed to develop, the probe of the MiniRAE 3000 photoionization detector (PID) was inserted into the bag and the displayed reading was recorded in the field notes along with other pertinent information such as the time of collection and reading, and the location of the sample.

3.2 Soil Sampling Methods

Analytical samples were collected from the base, dispensers and piping at the frequencies required per 18 AAC 78 for an assessment of a closure by removal. Analytical samples from stockpiles were collected at the frequencies presented in Table 2B of the FSG. Additional samples were collected for the purpose of further characterizing suspect soils within the excavation, including one sidewall sample that was collected from near the southeast corner, and an analytical sample was also collected from the base of the 5-foot test pit which was excavated to look for the presence of groundwater (but not encountered). Analytical soil samples were collected using new, clean, disposable nitrile gloves and soils were placed directly into clean laboratory-provided containers. Volatile samples were collected first and preserved with 25-mL of methanol, per Alaska Method (AK 101). Six inches of soil were removed prior to sampling. When the excavator was used to collect soil for sampling from within the excavation, the sample was collected from soils away from the surface of the bucket, and six inches of soil were removed immediately prior to sampling to expose fresh soils.

3.3 Analytical Methods

The analytical samples were submitted to SGS North America, Inc. (SGS) of Anchorage, Alaska. All samples were analyzed for:

- gasoline range organics (GRO) by method AK 101,
- diesel range organics (DRO) by method AK 102
- volatile organic compounds (VOCs) by method EPA 8260C, and

In addition, 10% of samples were analyzed for:

- polynuclear aromatic hydrocarbons (PAH) by EPA 8270D SIMS and
- 1,2-dibromoethane (EDB) by EPA 8260C SIMS.

4.0 FIELD ACTIVITIES

Field activities were conducted on September 16 and 17, 2019. Weather at the time of the investigation consisted of mostly cloudy skies, with scattered light showers and ambient temperatures ranging from 45 to 55 ° Fahrenheit. Glenn Hasburgh, EMI operated as both the ADEC Certified UST Worker and ADEC Qualified Environmental Professional (QEP). J&L

Enterprises, Inc. was contracted by the owner to provide the heavy equipment and operator. EMI subcontracted with SGS to provide the analytical services. Field notes documenting the field activities are provided in Appendix A.

4.1 Dispenser and Piping Removal

The pumphouses for the dispensers were removed sometime in past years, but the concrete island remained. Google Earth Street View from 2011 shows the dispensers to not be present at that time. When operational, gasoline and diesel had separate dispensers, as indicated by the remaining dispenser boxes on the island. The dispenser boxes were offset from the centerline of the tank, with one to the east and the other to the west. Immediately adjacent to the dispenser boxes (within 2 feet) were the vent lines. The lines ran into a common sump that housed the fill ports for both the gasoline and diesel. There were no pipe runs or trenches that extended beyond the limits of excavation.

Initial operations consisted of removing the concrete island on surrounding pad, which measured approximately 30 feet by 30 feet. During the concrete removal ambient PID readings were collected from the freshly exposed soils and they were inspected for odor. No PID deflections greater than one ppm or odor were noted, nor were any other indicators of contamination.

On September 17 the removal of the tank and appurtenances began. EMI took three headspace samples from beneath each of the dispensers to represent the dispensers and the vent line. These soils were also inspected for odor. No indications of contamination associated with the dispensers were noted. Analytical samples were then collected in accordance with the above referenced regulations.

4.2 Tank Removal

Once the samples from the dispenser area were collected excavation began to uncover the tank. Soils were regularly inspected and headspace were collected at a minimum frequency of one per 10 cubic yard (cy). When excavating in the area of the sump, on the west side of the sump near its interface with the tank, fuel odors and elevated PID readings were observed. Four headspace samples were collected from around the sump, roughly in line with the cardinal directions. Only the headspace from the west side of the sump had an elevated reading. An analytical sample was collected from this location (sample ID: Sump-1).

Excavation continued and suspect soils were transferred to short-term stockpile that was constructed using two layers of 6-mil reinforced polyethylene sheeting. The contamination initially was only present on the west side of the tank, and it appeared that the release from the sump followed the curvature of the tank. However, when excavating in the southeast corner fuel odor was once again observed, beginning approximately one foot below ground surface (bgs). The source of this second area of contamination is unknown since there were no appurtenances in the area.

Approximately 30-50 cy of impacted soil was removed and segregated and placed into presumed clean and presumed contaminated stockpiles.

The tank was then lifted from the ground secured with blocking to prevent rolling and labeled in accordance with American Petroleum Institute 1604. Following the tank removal, the excavation measured 18 x 37 feet with a total excavation area of approximately 370 sq.ft.. The tank itself measured approximately 10 x 30 feet. The excavation was approximately 12 feet in depth from the ground surface at the deepest location.

4.3 Stockpile Characterization

Two stockpiles were generated during the course of the investigation; a presumed clean stockpile and a presumed contaminated stockpile. The presumed clean stockpile was initially placed immediately adjacent to the excavation, but was ultimately divided into two separate piles due to limited space. The presumed contaminated stockpile located on a lined area approximately 400 feet southwest from the excavation, near the Caribou Hotel which is owned by the same entity.

The portion of the presumed clean stockpile that was relocated was placed in the same general vicinity of the presumed contaminated. For the purpose of characterization, the divided presumed clean pile was field screened as if they were separate piles, but analytical sample frequencies were based on it being a single pile.

The presumed clean stockpile was estimated to contain 150 cubic yards and the presumed contaminated contained approximately 40 cubic yards. Analytical samples were also collected at the frequencies presented in the FSG. The presumed clean stockpile was field screened and sampled according to the FSG.

4.4 Excavation Characterization

The excavation was characterized by field screening the base of the excavation in accordance with the FSG and collecting analytical samples as required by 18 AAC 78 for closure by removal. The sidewalls were field screened by collecting 12 headspace samples from each the east and west sidewalls and nine from each the north and south sidewalls. One analytical sample was collected from each sidewall from the most elevated headspace. However, all except one (sample ID: SSW-1) were placed on hold pending result of other samples. Analysis determined sample SSW-1 had contaminant concentrations in excess of MTG cleanup levels, therefore, the other sidewall samples were not analyzed since clean closure was no longer an option.

From the base of the excavation 14 headspace samples were collected and analyzed in accordance with the FSG. Based on the square footage of the excavation four analytical samples were collected per 18 AAC 78, plus a duplicate (EX-19 is a duplicate of EX-9).

4.5 Investigative Derived Waste

Investigative derived waste (IDW) generated during the field activities included disposable sampling equipment, and personal protective equipment (PPE). Both PPE and sampling equipment

were generated in small quantities, and were disposed of as municipal solid waste. This included nitrile gloves, Ziploc bags, and empty methanol vials.

5.0 RESULTS

This section presents the field screening and analytical results associated with this site assessment. Field screening results are presented in Table 1 and analytical results are presented in Table 2. The SGS laboratory report and ADEC Laboratory Data Review Checklist are provided in Appendix C.

5.1 Field Screening Results

A total of 110 headspace samples were collected during the course of the site assessment. This sample set consisted of: three from beneath each of the two dispensers; four from around the sump; 12 from exhumed soils during the course of excavation; 23 from the presumed clean stockpile; seven from the presumed contaminated stockpile; 14 from the excavation base, 12 each from the east and west sidewalls; and nine each from the north and south sidewalls. Headspace results are presented in Table 1.

Of the headspace samples (10 total) collected to represent the dispenser area and the sump only one had an elevated result, with a value of 227 ppm (headspace ID: sump 1); the soils associated with the headspace also had a noticeable fuel odor. The other headspace were all less than 5 ppm with no detected odor.

Results for the headspace samples collected during the course of excavation ranged from 0.3 to 227 ppm (headspace ID: Excavation 7), which was collected from the west side of the tank, near the tanks midline and beneath the suspected release from the sump.

Two headspace from the base of the of the excavation had elevated headspace results, these results were 244 ppm (headspace ID; Base 1) and 338 ppm (headspace ID: Base 9). All other results were less than 15 ppm, with the majority being less than 2 ppm.

Headspace results from the south sidewall ranged from 4.2 to 888 ppm, with three samples having values greater than 200 ppm. These samples came from the same general area around the southeast corner of the excavation. The headspace values along the remainder of the south sidewall were all less than 10 ppm. The headspace results from the other sidewalls were also relatively low, with the highest being 11.7 (headspace ID: West Sidewall 9).

A total of 17 headspace were originally collected presumed clean stockpile. Of these four had elevated reading greater than 50 ppm and as a result the soils were removed and placed into the presumed contaminated stockpile. An additional six headspace were collected after these soils were removed. There results of these additional headspace were all below 15 ppm except one which had a result of 59.2 ppm (headspace ID: Stockpile 22).

The results of the headspace collected from presumed contaminated stockpile ranged from 37.1 to 261 ppm.

5.2 Analytical Results

A total of 16 analytical samples were analyzed for this project, including one duplicate (sample EX-19 is a duplicate of EX-9). A duplicate for EDB analysis was not collected. This sample set consisted of one sample from each of the two dispensers, one from the sump, four from the base of the excavation, one from the base of the test pit, one from the south sidewall, four from presumed clean stockpile, and two from the contaminated stockpile. Additional samples were collected from the other three sidewalls, but were put on hold and not analyzed since clean closure is not being pursued.

Each of the samples collected from beneath the dispenser had analytes that exceed ADEC Method Two cleanup level for migration to groundwater (MTG). Sample Gas-Disp-01 had DRO at a concentration of 2,930 mg/kg, which exceeds the 250 mg/kg MTG cleanup level. This samples also had naphthalene in excess of the cleanup level, with a concentration of .046 mg/kg (MTG cleanup level: 0.038 mg/kg). Sample Gas-Disp-02 had Tetrachloroethene (PCE) detected at a concentration of 0.356 mg/kg, which exceeds the 0.190 mg/kg MTG cleanup level. PCE was also detected in other project samples, but at concentrations below the cleanup level. The soils which represent these samples were removed during the excavation and placed into the contaminated stockpile.

Sample Sump-1 which was collected from the area where contamination was first identified detected DRO at a concentration of 5,000 mg/kg, exceeding the MTG cleanup level. Trimethylbenzene was also detected in excess of the cleanup level at a concentration of 0.820 mg/kg (MTG cleanup level: 0.66 mg/kg). These soils were removed during the course of excavation and placed into the presumed contaminated stockpile.

All samples from the base of the excavation had analyte detections below MTG cleanup levels.

The one sidewall sample that was analyzed (sample ID: SSW-1) had multiple analytes at concentrations in excess of their MTG cleanup levels. These include: DRO at 693 mg/kg (MTG cleanup level: 250 mg/kg); 1,2,4-trimethylbenzene at 5.57 mg/kg (MTG cleanup level: 0.66 mg/kg); ethylbenzene at 0.347 mg/kg (MTG cleanup level: 0.13 mg/kg); naphthalene at 0.388 mg/kg (MTG cleanup level: 0.38 mg/kg); and xylenes at 6.83 mg/kg (MTG cleanup level: 1.5 mg/kg). Other analytes in this sample were below their respective cleanup levels.

Samples from presumed the clean stockpile, which was used as backfill at the site, found all analytes to be below the MTG cleanup levels. Sample Con-ST-1, collected from the presumed contaminated stockpile had DRO at a concentration of 1,010 mg/kg, 1,2,3-trimethylbenzene at 0.763 mg/kg, and naphthalene at 0.088 mg/kg; each of these are in excess of MTG cleanup levels. It should also be noted that soils associated with sample Gas-Disp-02, which found tetrachloroethene in excess of the MTG, was placed into the contaminated stockpile. Tetrachloroethene was also detected in both samples collected from the contaminated stockpile, but at concentrations below the MTG cleanup level.

5.3 Data Validation

An ADEC Laboratory Data Review Checklist was completed for SGS Report 1193586. This checklist is attached to the laboratory report in Appendix C.

Only minor QC failures were noted in the report. One was surrogate recovery failures in some of the field samples which were the result of matrix interference. This does not impact data usability since other analytes in the affected samples had detections in excess of the MTG cleanup level. The other discrepancy noted was failed recoveries in the matrix Spike (MS) and matrix spike duplicate (MSD). This does not have a significant impact on the accuracy of the data since laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were also analyzed for the affected samples and analyses and were within control limits.

A single duplicate sample was collected for the entire project and not at the one per day plus one per 10 field samples frequency called for in the FSG. This was intentionally done to conserve sampling containers because the number of characterization samples needed due to the presence of suspect contamination exceeded the initial estimated number of containers needed. There was also another project scheduled on the same property and an adequate number of sample containers had to be conserved for that effort. The deviation from the FSG does not have any significant impact on project since contamination is confirmed at the site, and also because the limits of excavation, what is remaining on site, has had duplicate analysis at the prescribed frequency.

No other quality control failures that would impact data usability were noted.

6.0 DISCUSSION

Some of the contamination at the site is believed to be the result of a leak from a connection within the sump. Field screening and site observations suggest that release flowed down to the top of the tank and then flowed over the tank's curvature to the west, where it migrated deeper in the sandy soils. No impermeable soils or features such as permafrost that would act as a confining layer were encountered. Due to the sandy nature of the soils and the lack of confining layers there is the potential that the contamination has migrated to groundwater interface, where it would likely then form a smear zone and move laterally.

The contamination near the southeast corner of the excavation is of unknown origin, but has indications of being a surface release. The extent of this contamination is also unknown.

The presumed clean stockpile was confirmed as clean. These soils were used as backfill following excavation. The presumed contaminated stockpile was confirmed and contaminated and remains onsite pending the development and implementation of a treatment plan.

The tank was rinsed with water and the rinsate was transported to Anchorage, Alaska for disposal by NRC Alaska, LLC. The tank was sold to a private party on October 19, 2019. The disposal receipt for the rinsate and bill of sale are attached.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Soils with contaminant levels in excess of the ADEC MTG cleanup levels are present at the site. All analytes sampled were below the Human Health levels for the Under 40-Inch Zone. The vertical and lateral extent of the contamination is still unknown and it is also unknown if groundwater at the site has been impacted.

Based on data obtained during this site assessment and the unknown extent of contamination, additional site characterization to assess the extent and impact to groundwater is warranted.

The person who prepared this report meets the requirements of a Qualified Environmental Professional per 18 AAC 78.088(b). If you have any questions or wish to discuss this project further please do not hesitate to contact Glenn Hasburgh or the undersigned at (907) 272-9336.

Environmental Management, Inc.

A handwritten signature in black ink, appearing to read 'G. Hasburgh', with a long horizontal flourish extending to the right.

Glenn Hasburgh
Environmental Scientist, QEP

Table 1 - Field Screening Results

ID	Time Collected	Time Read	Depth (feet)	Result (ppm)	Notes	Sample ID
Base 9	Collected and Analyzed within 1 hour		8.0	338		Ex-9: Dup EX-19
Base 10	Collected and Analyzed within 1 hour		8.0	4.5		
Base 11	Collected and Analyzed within 1 hour		14.0	2.6		
Base 12	Collected and Analyzed within 1 hour		8.0	11.8		EX-12
Base 13	Collected and Analyzed within 1 hour		8.0	1.7		
Base 14	Collected and Analyzed within 1 hour		14.0	2.1		EX-14
West Sidewall 1	Collected and Analyzed within 1 hour		1.5	0.7		
West Sidewall 2	Collected and Analyzed within 1 hour		5.0	1.4		
West Sidewall 3	Collected and Analyzed within 1 hour		8.0	1.2		
West Sidewall 4	Collected and Analyzed within 1 hour		1.5	1.9		
West Sidewall 5	Collected and Analyzed within 1 hour		5.0	1.6		
West Sidewall 6	Collected and Analyzed within 1 hour		8.0	1.9		
West Sidewall 7	Collected and Analyzed within 1 hour		1.5	1.7		
West Sidewall 8	Collected and Analyzed within 1 hour		5.0	1.5		
West Sidewall 9	Collected and Analyzed within 1 hour		8.0	11.7		
West Sidewall 10	Collected and Analyzed within 1 hour		1.5	1.2		
West Sidewall 11	Collected and Analyzed within 1 hour		5	1		
West Sidewall 12	Collected and Analyzed within 1 hour		8	1.2		
North Sidewall 1	Collected and Analyzed within 1 hour		1.5	1.1		
North Sidewall 2	Collected and Analyzed within 1 hour		5	1.6		
North Sidewall 3	Collected and Analyzed within 1 hour		8	1.2		
North Sidewall 4	Collected and Analyzed within 1 hour		1.5	1.4		
North Sidewall 5	Collected and Analyzed within 1 hour		5	1.3		
North Sidewall 6	Collected and Analyzed within 1 hour		8	7.4		
North Sidewall 7	Collected and Analyzed within 1 hour		1.5	1.7		
North Sidewall 8	Collected and Analyzed within 1 hour		5	1.2		
North Sidewall 9	Collected and Analyzed within 1 hour		8	1.8		
South Sidewall 1	Collected and Analyzed within 1 hour		1.5	888		SSW-1
South Sidewall 2	Collected and Analyzed within 1 hour		5	350		
South Sidewall 3	Collected and Analyzed within 1 hour		8	237		
South Sidewall 4	Collected and Analyzed within 1 hour		1.5	6.4		
South Sidewall 5	Collected and Analyzed within 1 hour		5	2.4		
South Sidewall 6	Collected and Analyzed within 1 hour		8	4.2		

Table 1 - Field Screening Results

ID	Time Collected	Time Read	Depth (feet)	Result (ppm)	Notes	Sample ID
South Sidewall 7	Collected and Analyzed within 1 hour		1.5	6		
South Sidewall 8	Collected and Analyzed within 1 hour		5	3		
South Sidewall 9	Collected and Analyzed within 1 hour		8	7		
East Sidewall 1	Collected and Analyzed within 1 hour		1.5	4.1		
East Sidewall 2	Collected and Analyzed within 1 hour		5	2.2		
East Sidewall 3	Collected and Analyzed within 1 hour		8	74		
East Sidewall 4	Collected and Analyzed within 1 hour		1.5	7.4		
East Sidewall 5	Collected and Analyzed within 1 hour		5	5.7		
East Sidewall 6	Collected and Analyzed within 1 hour		8	3.3		
East Sidewall 7	Collected and Analyzed within 1 hour		1.5	5.7		
East Sidewall 8	Collected and Analyzed within 1 hour		5	3.5		
East Sidewall 9	Collected and Analyzed within 1 hour		8	3.5		
East Sidewall 10	Collected and Analyzed within 1 hour		1.5	4.2		
East Sidewall 11	Collected and Analyzed within 1 hour		5	1.4		
East Sidewall 12	Collected and Analyzed within 1 hour		8	2.4		
Test Pit 1	Collected and Analyzed within 1 hour		20	1.5	Transition to native soils	
Test Pit 2	Collected and Analyzed within 1 hour		27	58.5	Base of test pit	Base-Test Pit
Stockpile Characterization						
Stockpile 1	Collected and Analyzed within 1 hour		1.5	Void		
Stockpile 2	Collected and Analyzed within 1 hour		1.5	2.8		
Stockpile 3	Collected and Analyzed within 1 hour		1.5	3.3		
Stockpile 4	Collected and Analyzed within 1 hour		1.5	71.9	Moved to Cont. Stockpile	
Stockpile 5	Collected and Analyzed within 1 hour		1.5	18.9		ST-1-5
Stockpile 6	Collected and Analyzed within 1 hour		1.5	2.5		
Stockpile 7	Collected and Analyzed within 1 hour		1.5	2.6		
Stockpile 8	Collected and Analyzed within 1 hour		1.5	20.2		ST-1-7
Stockpile 9	Collected and Analyzed within 1 hour		1.5	14.9		
Stockpile 10	Collected and Analyzed within 1 hour		1.5	6.9		
Stockpile 11	Collected and Analyzed within 1 hour		1.5	117	Moved on Cont. Stockpile	
Stockpile 12	Collected and Analyzed within 1 hour		1.5	84.2	Moved on Cont. Stockpile	
Stockpile 13	Collected and Analyzed within 1 hour		1.5	59.9	Moved on Cont. Stockpile	
Stockpile 14	Collected and Analyzed within 1 hour		1.5	59.7	Moved on Cont. Stockpile	
Stockpile 15	Collected and Analyzed within 1 hour		1.5	5.6		

Table 1 - Field Screening Results

ID	Time Collected	Time Read	Depth (feet)	Result (ppm)	Notes	Sample ID
Stockpile 16	Collected and Analyzed within 1 hour		1.5	15.7		ST-1-16
Stockpile 17	Collected and Analyzed within 1 hour		1.5	9.3		
Stockpile 18	Collected and Analyzed within 1 hour		1.5	0.5	After soil removal	
Stockpile 19	Collected and Analyzed within 1 hour		1.5	0.7	After soil removal	
Stockpile 20	Collected and Analyzed within 1 hour		1.5	0.4	After soil removal	
Stockpile 21	Collected and Analyzed within 1 hour		1.5	11.7	After soil removal	
Stockpile 22	Collected and Analyzed within 1 hour		1.5	59.2	After soil removal	ST-1-22
Stockpile 23	Collected and Analyzed within 1 hour		1.5	12.5	After soil removal	
Contaminated Stockpile 1	Collected and Analyzed within 1 hour		1.5	261		Con-St-1
Contaminated Stockpile 2	Collected and Analyzed within 1 hour		1.5	37.1		
Contaminated Stockpile 3	Collected and Analyzed within 1 hour		1.5	126		
Contaminated Stockpile 4	Collected and Analyzed within 1 hour		1.5	49.1		
Contaminated Stockpile 5	Collected and Analyzed within 1 hour		1.5	55.5		
Contaminated Stockpile 6	Collected and Analyzed within 1 hour		1.5	76		
Contaminated Stockpile 7	Collected and Analyzed within 1 hour		1.5	203		Con-ST-7

Table 2a - Tank and Excavation Analytical Results

			EMI Sample Id:	Gas-Disp-02	Gas-Disp-01	Sump-1	EX-1	EX-9	EX-19	EX-12	EX-14	SSW-1	Base-Test Pit	Trip Blank
Analysis	Analyte	Unit	Cleanup Level											
AK101	Gasoline Range Organics	mg/Kg	300	1.83 U	2.29 U	28.5	2.15 U	1.61 U	1.70 U	1.89 U	1.54 U	51.3		2.51 U
AK102	Diesel Range Organics	mg/Kg	250	91.9	2930	5000	33.3	91.3	63.6	48.9	31.6	693	75.2	
SM21 2540G	Total Solids	%		92.5	89.8	96.9	90.5	94.3	94.9	95.0	97.5	93.0	94.3	
SW6020A	Lead	mg/Kg		21.8	14.2	1.46	33.7	11.2	10.9	5.61	1.51	31.0		
SW8260C	1,1,1,2-Tetrachloroethane	ug/Kg	22	14.6 U	18.3 U	117 U	17.2 U	12.9 U	13.6 U	15.1 U	12.4 U	73.2 U		20.1 U
SW8260C	1,1,1-Trichloroethane	ug/Kg	32000	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,1,2,2-Tetrachloroethane	ug/Kg	3	1.46 U	1.83 U	11.7 U	1.72 U	1.29 U	1.36 U	1.51 U	1.24 U	7.32 U		2.01 U
SW8260C	1,1,2-Trichloroethane	ug/Kg	1.4	0.585 U	0.733 U	4.68 U	0.687 U	0.515 U	0.543 U	0.606 U	0.494 U	2.93 U		0.802 U
SW8260C	1,1-Dichloroethane	ug/Kg	92	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,1-Dichloroethene	ug/Kg	1200	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,1-Dichloropropene	ug/Kg		18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,2,3-Trichlorobenzene	ug/Kg	150	36.6 U	45.8 U	293 U	42.9 U	32.2 U	33.9 U	37.9 U	30.9 U	183 U		50.1 U
SW8260C	1,2,3-Trichloropropane	ug/Kg	0.031	0.731 U	0.916 U	5.86 U	0.858 U	0.644 U	0.679 U	0.757 U	0.618 U	3.66 U		1.00 U
SW8260C	1,2,4-Trichlorobenzene	ug/Kg	82	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,2,4-Trimethylbenzene	ug/Kg	610	36.6 U	45.8 U	293 U	42.9 U	32.2 U	33.9 U	37.9 U	30.9 U	5720		50.1 U
SW8260C	1,2-Dibromo-3-chloropropane	ug/Kg		73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U		100 U
SW8260C	1,2-Dibromoethane	ug/Kg	0.24	0.731 U	0.916 U	5.86 U	0.858 U	0.644 U	0.679 U	0.757 U	0.618 U	3.66 U		1.00 U
SW8260C	1,2-Dichlorobenzene	ug/Kg	2400	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,2-Dichloroethane	ug/Kg	5.5	1.46 U	1.83 U	11.7 U	1.72 U	1.29 U	1.36 U	1.51 U	1.24 U	7.32 U		2.01 U
SW8260C	1,2-Dichloropropane	ug/Kg	30	7.31 U	9.16 U	58.6 U	8.58 U	6.44 U	6.79 U	7.57 U	6.18 U	36.6 U		10.0 U
SW8260C	1,3,5-Trimethylbenzene	ug/Kg	660	18.3 U	22.9 U	820	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	5570		25.1 U
SW8260C	1,3-Dichlorobenzene	ug/Kg	2300	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	1,3-Dichloropropane	ug/Kg		7.31 U	9.16 U	58.6 U	8.58 U	6.44 U	6.79 U	7.57 U	6.18 U	36.6 U		10.0 U
SW8260C	1,4-Dichlorobenzene	ug/Kg	37	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	2,2-Dichloropropane	ug/Kg		18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	2-Butanone (MEK)	ug/Kg	15000	183 U	229 U	1460 U	215 U	161 U	170 U	189 U	154 U	914 U		251 U
SW8260C	2-Chlorotoluene	ug/Kg		18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	2-Hexanone	ug/Kg	110	73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U		100 U
SW8260C	4-Chlorotoluene	ug/Kg		18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	4-Isopropyltoluene	ug/Kg		73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	3490		100 U
SW8260C	4-Methyl-2-pentanone (MIBK)	ug/Kg	18000	183 U	229 U	1460 U	215 U	161 U	170 U	189 U	154 U	914 U		251 U
SW8260C	Acetone	ug/Kg	38000	183 U	229 U	1460 U	215 U	161 U	170 U	189 U	154 U	914 U		251 U
SW8260C	Benzene	ug/Kg	22	9.14 U	11.5 U	73.2 U	10.7 U	8.05 U	8.48 U	9.46 U	7.72 U	45.7 U		12.5 U
SW8260C	Bromobenzene	ug/Kg	360	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	Bromochloromethane	ug/Kg		18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	Bromodichloromethane	ug/Kg	4.3	1.46 U	1.83 U	11.7 U	1.72 U	1.29 U	1.36 U	1.51 U	1.24 U	7.32 U		2.01 U
SW8260C	Bromoform	ug/Kg	100	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U
SW8260C	Bromomethane	ug/Kg	24	14.6 U	18.3 U	117 U	17.2 U	12.9 U	13.6 U	15.1 U	12.4 U	73.2 U		20.1 U
SW8260C	Carbon disulfide	ug/Kg	2900	73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U		100 U
SW8260C	Carbon tetrachloride	ug/Kg	21	9.14 U	11.5 U	73.2 U	10.7 U	8.05 U	8.48 U	9.46 U	7.72 U	45.7 U		12.5 U
SW8260C	Chlorobenzene	ug/Kg	460	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U		25.1 U

Table 2a - Tank and Excavation Analytical Results

EMI Sample Id:			Gas-Disp-02	Gas-Disp-01	Sump-1	EX-1	EX-9	EX-19	EX-12	EX-14	SSW-1	Base-Test Pit	Trip Blank
Analysis	Analyte	Unit	Cleanup Level										
SW8260C	Chloroethane	ug/Kg	72000	146 U	183 U	1170 U	172 U	129 U	136 U	151 U	124 U	732 U	201 U
SW8260C	Chloroform	ug/Kg	7.1	1.46 U	1.83 U	11.7 U	1.72 U	1.29 U	1.36 U	1.51 U	1.24 U	14.6 U	2.01 U
SW8260C	Chloromethane	ug/Kg	610	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U	25.1 U
SW8260C	Dibromochloromethane	ug/Kg	2.7	1.46 U	1.83 U	11.7 U	1.72 U	1.29 U	1.36 U	1.51 U	1.24 U	7.32 U	2.01 U
SW8260C	Dibromomethane	ug/Kg	25	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U	25.1 U
SW8260C	Dichlorodifluoromethane	ug/Kg	3900	36.6 U	45.8 U	293 U	42.9 U	32.2 U	33.9 U	37.9 U	30.9 U	183 U	50.1 U
SW8260C	Ethylbenzene	ug/Kg	130	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	347	25.1 U
SW8260C	Freon-113	ug/Kg	310000	73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U	100 U
SW8260C	Hexachlorobutadiene	ug/Kg	20	14.6 U	18.3 U	117 U	17.2 U	12.9 U	13.6 U	15.1 U	12.4 U	73.2 U	20.1 U
SW8260C	Isopropylbenzene (Cumene)	ug/Kg	5600	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	1100	25.1 U
SW8260C	Methyl-t-butyl ether	ug/Kg	400	73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U	100 U
SW8260C	Methylene chloride	ug/Kg	330	73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U	100 U
SW8260C	Naphthalene	ug/Kg	38	18.3 U	46.5	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	388	25.1 U
SW8260C	P & M -Xylene	ug/Kg		36.6 U	45.8 U	293 U	42.9 U	32.2 U	33.9 U	37.9 U	30.9 U	3420	50.1 U
SW8260C	Styrene	ug/Kg	10000	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U	25.1 U
SW8260C	Tetrachloroethene	ug/Kg	190	356	17.0	79.0	129	11.9	8.48 U	15.0	31.0	45.7 U	12.5 U
SW8260C	Toluene	ug/Kg	6700	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U	25.1 U
SW8260C	Trichloroethene	ug/Kg	11	3.66 U	4.58 U	29.3 U	4.29 U	3.22 U	3.39 U	3.79 U	3.09 U	18.3 U	5.01 U
SW8260C	Trichlorofluoromethane	ug/Kg	41000	36.6 U	45.8 U	293 U	42.9 U	32.2 U	33.9 U	37.9 U	30.9 U	183 U	50.1 U
SW8260C	Vinyl acetate	ug/Kg	1100	73.1 U	91.6 U	586 U	85.8 U	64.4 U	67.9 U	75.7 U	61.8 U	366 U	100 U
SW8260C	Vinyl chloride	ug/Kg	0.8	0.585 U	0.733 U	4.68 U	0.687 U	0.515 U	0.543 U	0.606 U	0.494 U	2.93 U	0.802 U
SW8260C	Xylenes (total)	ug/Kg	1500	54.9 U	68.7 U	439 U	64.4 U	48.3 U	50.9 U	56.8 U	46.3 U	6830	75.2 U
SW8260C	cis-1,2-Dichloroethene	ug/Kg	120	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U	25.1 U
SW8260C	cis-1,3-Dichloropropene	ug/Kg	18	9.14 U	11.5 U	73.2 U	10.7 U	8.05 U	8.48 U	9.46 U	7.72 U	45.7 U	12.5 U
SW8260C	n-Butylbenzene	ug/Kg	23000	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	2170	25.1 U
SW8260C	n-Propylbenzene	ug/Kg	9100	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	2350	25.1 U
SW8260C	o-Xylene	ug/Kg		18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	3410	25.1 U
SW8260C	sec-Butylbenzene	ug/Kg	42000	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	1610	25.1 U
SW8260C	tert-Butylbenzene	ug/Kg	11000	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	95.1	25.1 U
SW8260C	trans-1,2-Dichloroethene	ug/Kg	1300	18.3 U	22.9 U	146 U	21.5 U	16.1 U	17.0 U	18.9 U	15.4 U	91.4 U	25.1 U
SW8260C	trans-1,3-Dichloropropene	ug/Kg	18	9.14 U	11.5 U	73.2 U	10.7 U	8.05 U	8.48 U	9.46 U	7.72 U	45.7 U	12.5 U
SW8260C-SIM	1,2-Dibromoethane	ug/Kg	0.24					0.0805 U	0.0848 U			0.366 U	0.125 U
8270D SIM (PAH)	1-Methylnaphthalene	ug/Kg	410					26.3 U	25.8 U			24.2 U	
8270D SIM (PAH)	2-Methylnaphthalene	ug/Kg	1300					26.3 U	25.8 U			65.7	
8270D SIM (PAH)	Acenaphthene	ug/Kg	37000					26.3 U	25.8 U			24.2 U	
8270D SIM (PAH)	Acenaphthylene	ug/Kg	18000					26.3 U	25.8 U			24.2 U	
8270D SIM (PAH)	Anthracene	ug/Kg	390000					26.3 U	25.8 U			24.2 U	
8270D SIM (PAH)	Benzo(a)Anthracene	ug/Kg	700					26.3 U	30.3			45.6	
8270D SIM (PAH)	Benzo[a]pyrene	ug/Kg	1900					26.3 U	39.0			56.5	
8270D SIM (PAH)	Benzo[b]Fluoranthene	ug/Kg	20000					26.3 U	47.2			67.6	
8270D SIM (PAH)	Benzo[g,h,i]perylene	ug/Kg	15000000					27.2	37.4			60.5	

Table 2a - Tank and Excavation Analytical Results

			EMI Sample Id:	Gas-Disp-02	Gas-Disp-01	Sump-1	EX-1	EX-9	EX-19	EX-12	EX-14	SSW-1	Base-Test Pit	Trip Blank
Analysis	Analyte	Unit	Cleanup Level											
8270D SIM (PAH)	Benzo[k]fluoranthene	ug/Kg	190000					26.3 U	25.8 U			26.1		
8270D SIM (PAH)	Chrysene	ug/Kg	600000					26.3 U	37.0			56.8		
8270D SIM (PAH)	Dibenzo[a,h]anthracene	ug/Kg	6300					26.3 U	25.8 U			24.2 U		
8270D SIM (PAH)	Fluoranthene	ug/Kg	590000					26.3 U	64.8			97.0		
8270D SIM (PAH)	Fluorene	ug/Kg	36000					26.3 U	25.8 U			24.2 U		
8270D SIM (PAH)	Indeno[1,2,3-c,d] pyrene	ug/Kg	65000					26.3 U	31.8			47.6		
8270D SIM (PAH)	Naphthalene	ug/Kg	38					21.0 U	20.6 U			19.3 U		
8270D SIM (PAH)	Phenanthrene	ug/Kg	39000					26.3 U	55.3			69.7		
8270D SIM (PAH)	Pyrene	ug/Kg	87000					26.3 U	63.1			93.8		

Table 2b - Stockpile Analytical Results

			EMI Sample Id:	St-1-7	St-1-16	St-1-22	St-1-5	Con-St-1	Con-St-7	Trip Blank
Analysis	Analyte	Unit	Cleanup Level							
AK101	Gasoline Range Organics	mg/Kg	300	1.99 U	2.06 U	2.16	2.22 U	13.2	5.13	2.51 U
AK102	Diesel Range Organics	mg/Kg	250	21.2 U	24.6	74.0	21.4 U	1010	182	
SW6020A	Lead	mg/Kg		15.3	16.0	11.1	10.8	4.37	12.5	
SW8260C	1,1,1,2-Tetrachloroethane	ug/Kg	22	15.9 U	16.5 U	12.0 U	17.8 U	12.2 U	19.6 U	20.1 U
SW8260C	1,1,1-Trichloroethane	ug/Kg	32000	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,1,2,2-Tetrachloroethane	ug/Kg	3	1.59 U	1.65 U	1.20 U	1.78 U	1.22 U	1.96 U	2.01 U
SW8260C	1,1,2-Trichloroethane	ug/Kg	1.4	0.636 U	0.660 U	0.480 U	0.710 U	0.487 U	0.785 U	0.802 U
SW8260C	1,1-Dichloroethane	ug/Kg	92	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,1-Dichloroethene	ug/Kg	1200	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,1-Dichloropropene	ug/Kg		19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,2,3-Trichlorobenzene	ug/Kg	150	39.7 U	41.3 U	30.0 U	44.4 U	30.4 U	49.1 U	50.1 U
SW8260C	1,2,3-Trichloropropane	ug/Kg	0.031	0.795 U	0.825 U	0.600 U	0.888 U	0.609 U	0.981 U	1.00 U
SW8260C	1,2,4-Trichlorobenzene	ug/Kg	82	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,2,4-Trimethylbenzene	ug/Kg	610	39.7 U	41.3 U	136	44.4 U	442	396	50.1 U
SW8260C	1,2-Dibromo-3-chloropropane	ug/Kg		79.5 U	82.5 U	60.0 U	88.8 U	60.9 U	98.1 U	100 U
SW8260C	1,2-Dibromoethane	ug/Kg	0.24	0.795 U	0.825 U	0.600 U	0.888 U	0.609 U	0.981 U	1.00 U
SW8260C	1,2-Dichlorobenzene	ug/Kg	2400	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,2-Dichloroethane	ug/Kg	5.5	1.59 U	1.65 U	1.20 U	1.78 U	1.22 U	1.96 U	2.01 U
SW8260C	1,2-Dichloropropane	ug/Kg	30	7.95 U	8.25 U	6.00 U	8.88 U	6.09 U	9.81 U	10.0 U
SW8260C	1,3,5-Trimethylbenzene	ug/Kg	660	19.9 U	20.6 U	131	22.2 U	763	325	25.1 U
SW8260C	1,3-Dichlorobenzene	ug/Kg	2300	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	1,3-Dichloropropane	ug/Kg		7.95 U	8.25 U	6.00 U	8.88 U	6.09 U	9.81 U	10.0 U
SW8260C	1,4-Dichlorobenzene	ug/Kg	37	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	2,2-Dichloropropane	ug/Kg		19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	2-Butanone (MEK)	ug/Kg	15000	199 U	206 U	150 U	222 U	152 U	245 U	251 U
SW8260C	2-Chlorotoluene	ug/Kg		19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	2-Hexanone	ug/Kg	110	79.5 U	82.5 U	60.0 U	88.8 U	60.9 U	98.1 U	100 U
SW8260C	4-Chlorotoluene	ug/Kg		19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	4-Isopropyltoluene	ug/Kg		79.5 U	82.5 U	60.0 U	88.8 U	171	258	100 U
SW8260C	4-Methyl-2-pentanone (MIBK)	ug/Kg	18000	199 U	206 U	150 U	222 U	152 U	245 U	251 U
SW8260C	Acetone	ug/Kg	38000	199 U	206 U	150 U	222 U	152 U	245 U	251 U
SW8260C	Benzene	ug/Kg	22	9.93 U	10.3 U	7.50 U	11.1 U	7.61 U	12.3 U	12.5 U
SW8260C	Bromobenzene	ug/Kg	360	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	Bromochloromethane	ug/Kg		19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	Bromodichloromethane	ug/Kg	4.3	1.59 U	1.65 U	1.20 U	1.78 U	1.22 U	1.96 U	2.01 U
SW8260C	Bromoform	ug/Kg	100	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	Bromomethane	ug/Kg	24	15.9 U	16.5 U	12.0 U	17.8 U	12.2 U	19.6 U	20.1 U
SW8260C	Carbon disulfide	ug/Kg	2900	79.5 U	82.5 U	60.0 U	88.8 U	60.9 U	98.1 U	100 U
SW8260C	Carbon tetrachloride	ug/Kg	21	9.93 U	10.3 U	7.50 U	11.1 U	7.61 U	12.3 U	12.5 U
SW8260C	Chlorobenzene	ug/Kg	460	19.9 U	20.6 U	15.0 U	22.2 U	15.2 U	24.5 U	25.1 U
SW8260C	Chloroethane	ug/Kg	72000	159 U	165 U	120 U	178 U	122 U	196 U	201 U



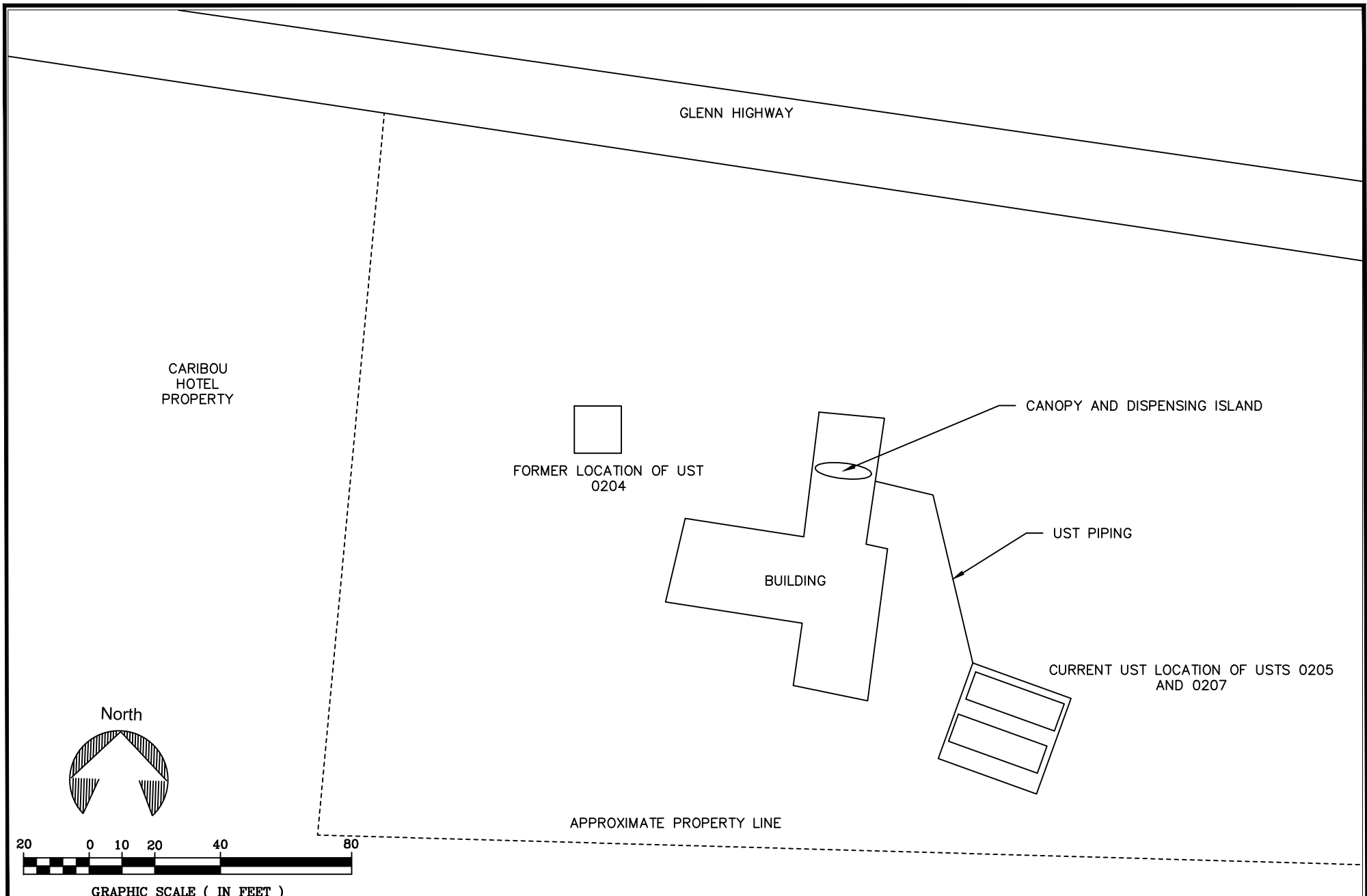
VICINITY MAP

GLENNALLEN UST 0204
GLENNALLEN, AK



EMI JOB: 18021
DRAWN: HJD
REVIEWED: GH
DATE: 11/8/19

FIGURE
1



SITE MAP

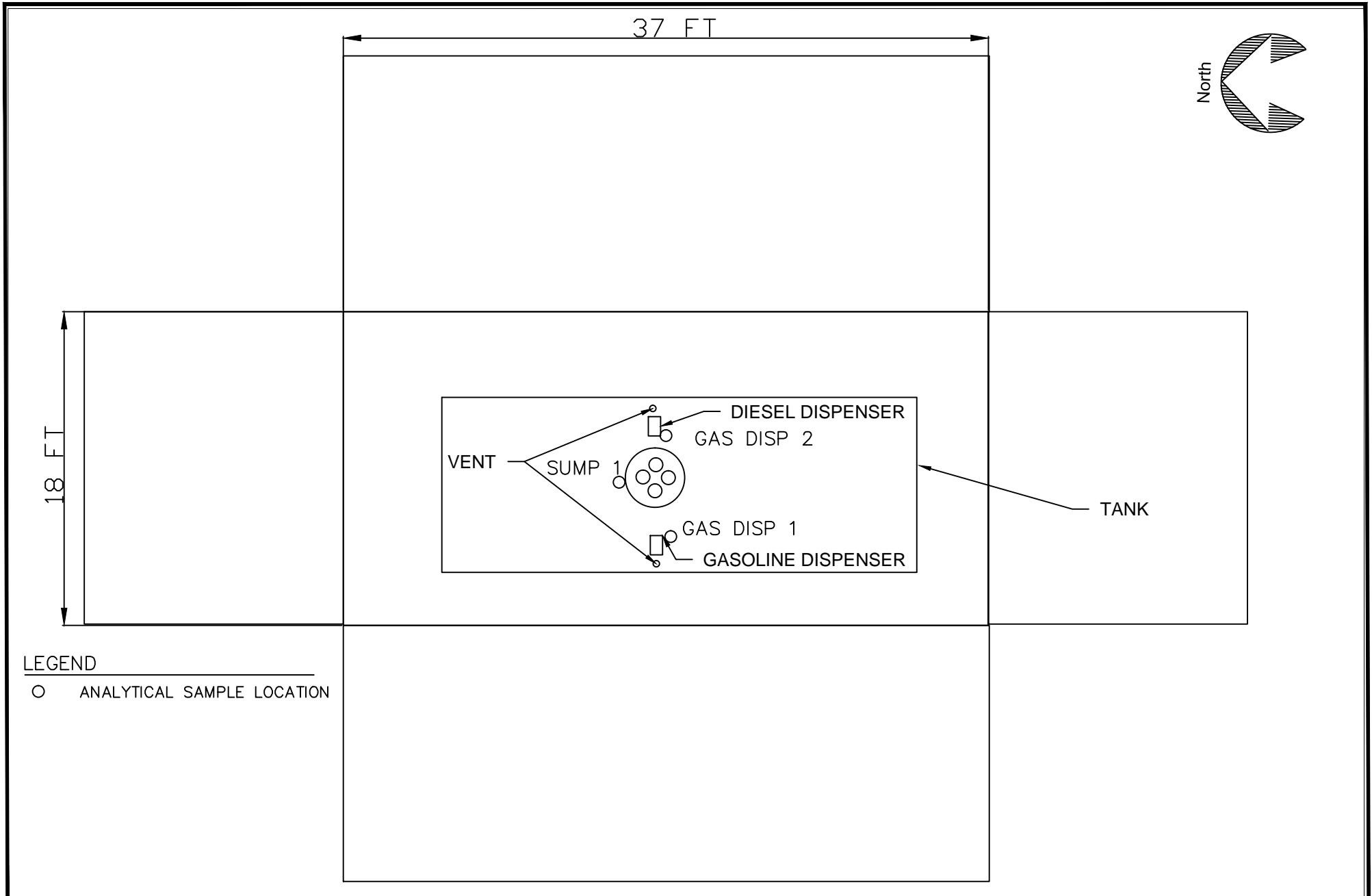
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GLENNALLEN, AK



EMI JOB: 18021
DRAWN: HJD
REVIEWED: GH
DATE: 8/31/2020

FIGURE

4



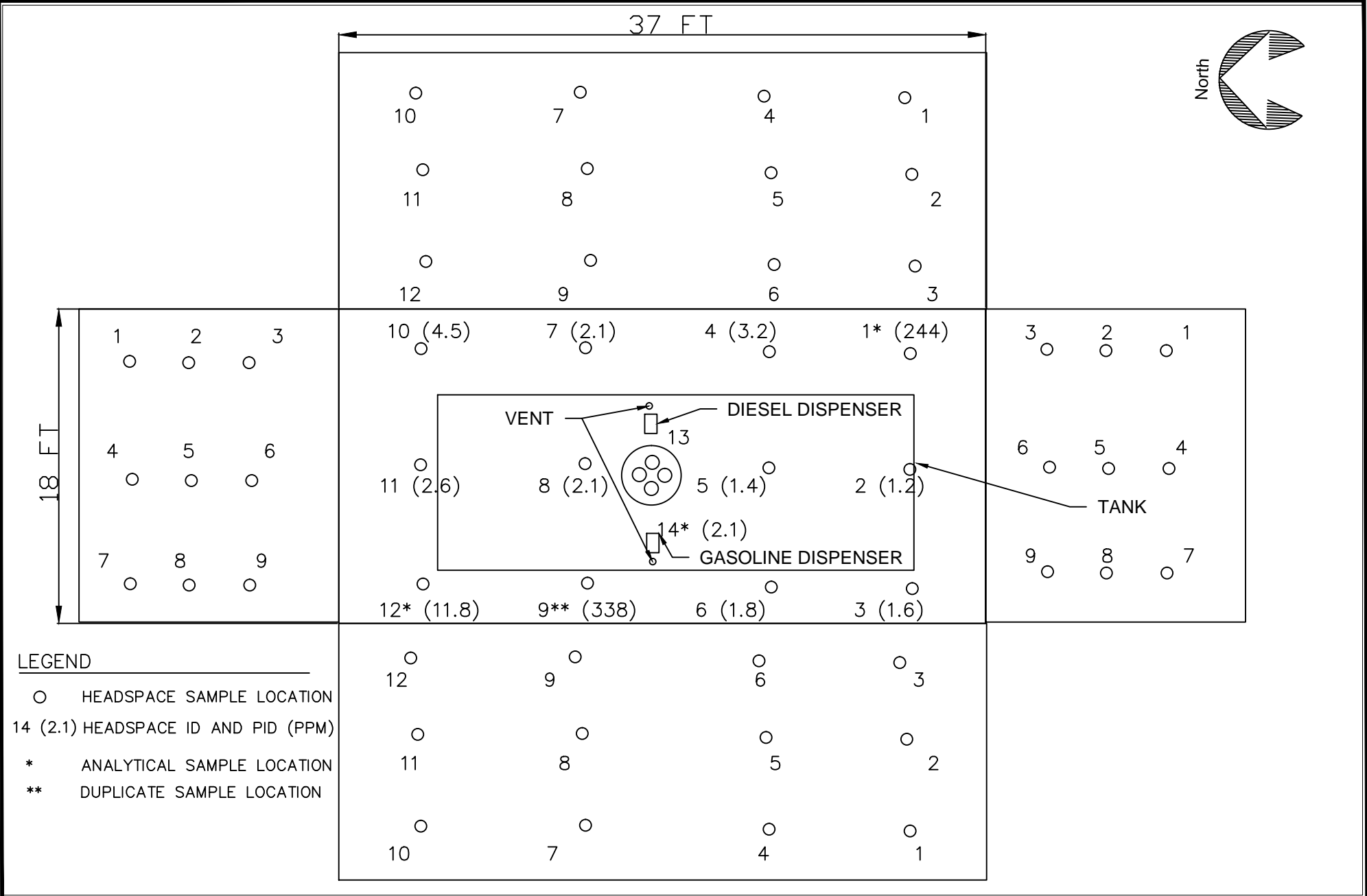
DISPENSER AND SUMP
SAMPLE LOCATIONS

GLENNALLEN UST 0204
GLENNALLEN, AK



EMI JOB: 18021
DRAWN: HJD
REVIEWED: GH
DATE: 11/8/19

FIGURE
3



**UST AND HEADSPACE
SAMPLE LOCATIONS**

**GLENNALLEN UST 0204
GLENNALLEN, AK**



EMI JOB: 18021
 DRAWN: HJD
 REVIEWED: GH
 DATE: 11/8/19

FIGURE
4

Appendix A
Field Notes

9/16/19 Glenallen Fuel
ad service
weather overcast 54°

UST

(64)

1245 - EMT Arrives on site

to the Removal of the UST
from the Glenallen Fuel
ad Service

- Cheryl pause with ADEL
was on site at the time of
EMT's Arrival.

- The contractor was busting up
the concrete around the
top of arrival

= PID Cal Check 98.2 ppm

4520 - LEL was checked on both
sides of the tank (diesel & gas)
LEL was 0% on each

1730 - Concrete Removal

continued for Removal
of day

- EMT am crews left site

9/17/19 Glenallen gas and fuel UST
weather partially cloudy 45° Am
PID Cal Check - 97.1 ppm

0700 - EMT Arrives on site to
Begin Removal.

* Contaminated Stakepile constructed
with 2-layers of gravel in
case contamination is encountered

* A grid was established (perched off)
600' took to the Area concrete
was removed. Ambient Readings
taken from surface soils - all
detections less than 1 ppm

- Head space collection for dispersion
- very minor fuel odor beneath
diesel pump. Head space values < 5

- 3 head space were collection for
beneath each dispersion. 1
analysis was collected for
the highest for each dispersion

Chemical fuel and service
9/17/19 (64)

The Analytical for the dispersion
were within 2' of the vent
lines and represent them also.

- when excavator opened the
sump soils with fuel odor
was prominent on the
west side of the sump
odor began ~ 4' Bys

- Head open to 155 observed

- if Headspace collector connected
sump. Analytical collected
from Highest Sump 1

- Excavation proceeded with soils
being segregated by color and
Ambients.

- while still excavating odor and
Ambients high as 20 were
noted on SE corner. Appears
Random where some has odor
while other not.

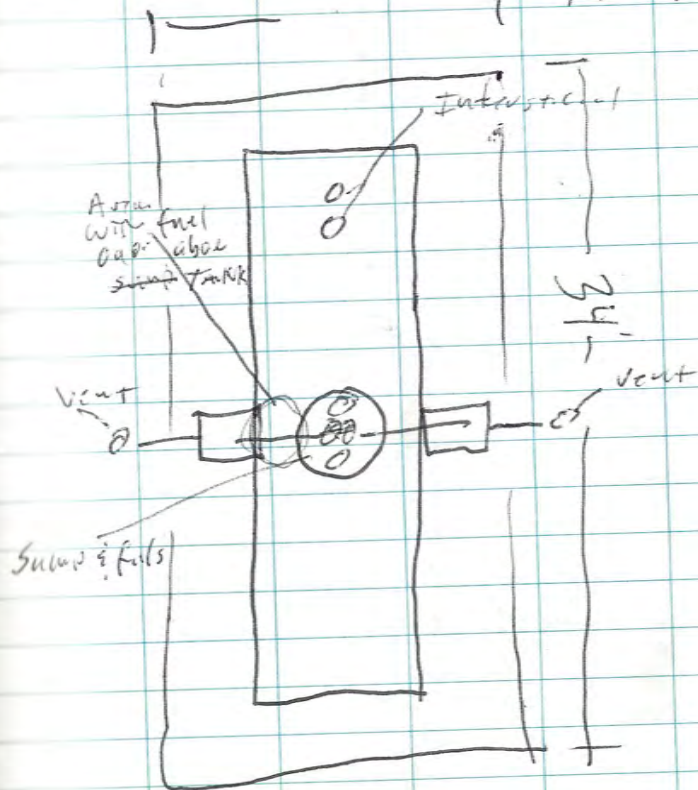
Glenn W. Head & Son Inc 9/17

ID	Time min	Time Read	Reading	Remarks	
Disp Descr (1)	0741	0758	3.1	Sampled at 2.5'	
	2	0742	0759	3.0	
	3	0743	0759	2.7	
Disp gas (2)	0747	0812	0.0		
	0748	0812	1.5	Sampled at 0816 2.5'	
	3	0749	0811	0.5	
Ex 1	0831	0910	0.3		
2	0840	"	1.0		
3	0849	0911	0.8		
4	0855	0911	10.2	Some orig. wa. Sump 3'	
5	0919	0930	7.1	2.5	
6	0925	0950	155	4' Bys	
Sump (1)	0935	1013	227	4' Sump 1' color	
Sump 2	0935	1013	1.3	5' No color	
Sump 3	0936	1014	0.7	4.5	
Sump 4	0937	1014	0.8	4.5	
Sump 5					
Ex 7	1006	1016	2.1	7'	
Ex 8	1040	1057	61	8'	
Ex 9	1100	1150	1.7	8'	
Ex 10	1100	1150	2.4	6'	
11	1120	1151	5.3	8'	
12	1130	1151		~ 8' color fuel on SE corner	

Blower system fuel & service
Head Space Log 9/17 (64)
Exhaustor Configuration

Ex	Coll. part. / m	8 th Det	(244)
2	1.6	14	1.2
3		8	1.6
4		8	3.2
5		14	1.4
6		8	1.8
7		8	2.1
8		14	2.1
9		8	(338)
10		8	4.5
11		14	2.6
12		8	(11.8)
13		14	1.7
14		14	(2.1)
WSW 1		1.5	0.7
2		5	1.4
3		8	1.2
4		1.5	1.9
5		5	1.6
6		8	1.9
7		1.5	1.7
8		5	1.5
9		8	(11.7)

Blower fuel and service 9/17 (64) 21
N

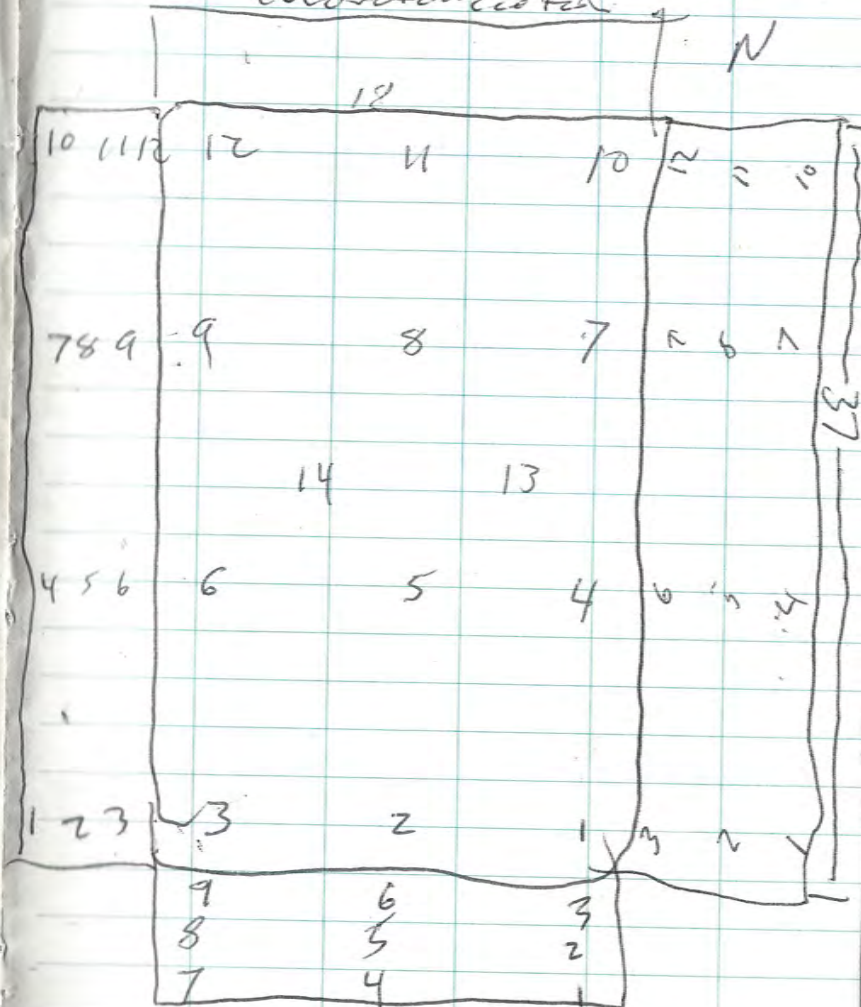


Chemical feed & source
9/17/09 GH

SP	time	depth	Residue
WSW 10	1.5	1.2	
11	5	1.0	
12	8	1.2	
SSW 1	1.5	888	
2	5	358	
3	8	237	
4	1.5	6.4	
5	5	2.4	
6	8	4.2	
7	1.5	6.0	
8	5	3.0	
9	8	7.0	
ESW 1		4.1	
2		2.2	
3		74	
4		7.4	
5		5.7	
6		3.3	
7		5.7	
8		3.5	
9		3.5	
10		4.2	
11		1.4	
12		2.4	

9/17

Excavation Chem other
feed & source
Characterized



Overwater level and sounder cut
9/17

ID	Time	Depth	Reading
MSW 1	within 1 hr		1.1
2			1.6
3			1.2
4			1.4
5			1.3
6			1.4
7			1.7
8			1.2
9			1.8

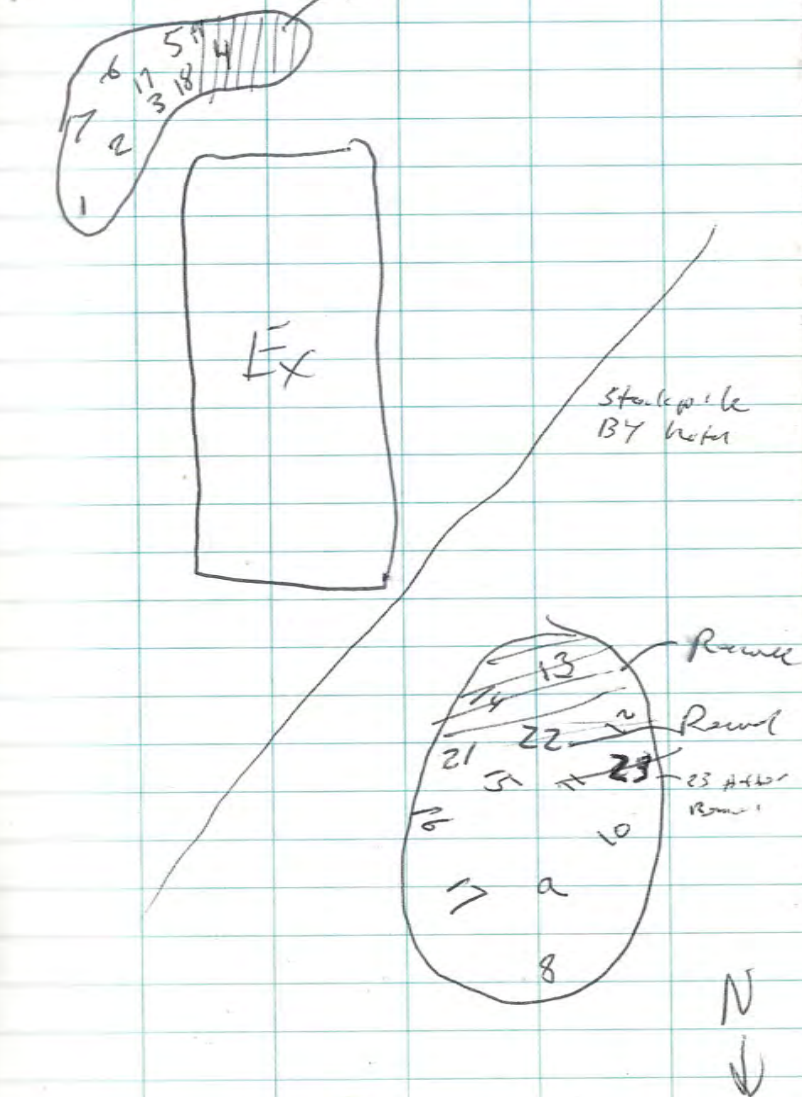
TEST pit

Water transducer 20' 1.5 ppm
Base of pit 25-30 58.5

St 1-1	Time	Depth	Reading
2	within 1 hr	1.5	2.8
3			3.3
4			7.9
5			18.9
6			2.5
7			2.6
8			20.2
9			14.9
10			6.9

-Removal
to con St.
0852
0902

Column after level of service
Steel pipe location 9/17
9/18



Glenn Miller level and ground
9/17 1918

St-1-11	water 1 in	Depth	
		1.5'	117 - Rinned
12			84.2
13			59.9 Removal
14			59.7
15			5.6
16			15.7 @ 09/19
17			9.3
18			0.5 After Rinned
19			0.7
20			0.4
21			11.7
22			59.2
23			12.5

Key St	water 1 in	Depth	
1		1.5	261
2			37.1
3			126
4			49.1
5			55.5
6			76.6
7			203

Glenn Miller level and
service 9/17

Continued from Pg 18

- Excavation proceeded, Segregation as necessary, until the Tank could be fixed.
- The tank was removed and placed near the wood shed, it was checked and all labeled for non use.
- The Base of the excavation was searched and sampled accordingly. Contamination was noted in 2 separate areas. of contamination were present on the base, in the Areas already noted - below diesel disp. and SE corner. The source of SE corner is unknown, may be surface spill but there were no pipes or discharges in Area.

Headspace were collected for the stock pipes for characterization.

→

Glennallen fuel and service
9/17/18

- There were two piles clean, and contaminated. The clean pile was separated to another stock pile for spare reasons.

- After the initial headspace were done two pockets of elevated readings were observed.

1830

- EMT will finish characterizing in the morning and soil has been removed from the stockpile.

- EMT left the site

9/18/19 Glennallen fuel and service last

- weather cloudy, scattered rain
wind gusts upto 30 mph.

- EMT will finish characterizing the stockpiles and backfill the excavation.

- Stockpiles were characterized, size log. EMT left site.
ex Backfill

Appendix B

Photo Log

Photo Log



Photo 1: September 16, 2019, looking southeast - This photo shows the Glennallen Fuel and Service gas station. The UST is located within the barrier fence.



Photo 2: September 16, 2019, looking east - This photo shows the dispenser island and concrete apron. The dispensers were removed sometime in the past, but the vent lines and island remained.

Photo Log



Photo 3: September 17, 2019, looking northwest – This photo shows removal of the dispenser boxes following the removal of the apron and island.



Photo 4: September 17, 2019, looking south - This photo shows the excavation of the tank in the area of the sump. There was evidence of a release from the sump and soils in the area right (west) of the sump (arrow) were impacted.

Photo Log



Photo 5: September 17, 2019, looking south - This photo shows the UST at the time of removal from the ground.



Photo 6: September 17, 2019, looking north - This photo shows the plastic barrier that was placed in the excavation prior to backfilling with the soils from the presumed clean stockpile.

Photo Log



Photo 7: September 17, 2019, looking south - This photo shows the presumed contaminated stockpile. The pile was covered with six-mil polyethylene sheeting after characterization sampling.



Photo 8: September 19, 2019, looking southeast - This photo shows the tank following removal. The tank was rinsed and collected water transported for disposal. The tank was sold to a private party.

Appendix C
SGS Laboratory Report of Analysis
And
ADEC Laboratory Data Review Checklist



Laboratory Report of Analysis

To: Environmental Mgmt Inc (EMI)
206 E. Fireweed Ln, Ste 201
Anchorage, AK 99503
(907)272-9336

Report Number: **1195630**

Client Project: **18021 UST 0204 Closure**

Dear Glenn Hasburgh,

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 Jillian 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.

Jillian Janssen
Project Manager
Jillian.Janssen@sgs.com

Date

Report of Manual Integrations

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Analytical Batch</u>	<u>Analyte</u>	<u>Reason</u>
8270D SIM (PAH)				
1195630006	EX-19	XMS11756	Benzo[k]fluoranthene	RP
1195630011	SSW-1	XMS11756	Benzo[k]fluoranthene	RP
SW8260C				
1195593006	LABREFQC	VMS19497	Naphthalene	RP
1195593006	LABREFQC	VMS19497	n-Butylbenzene	SP
1195630001	Gas-Disp-02	VMS19493	4-Isopropyltoluene	SP
1195630001	Gas-Disp-02	VMS19493	Naphthalene	RP
1195630002	Gas-Disp-01	VMS19493	n-Butylbenzene	SP
1195630003	Sump-1	VMS19493	Naphthalene	RP
1195630011	SSW-1	VMS19497	n-Butylbenzene	SP
1195630011	SSW-1	VMS19497	tert-Butylbenzene	SP
1195630018	Con-St-1	VMS19497	Naphthalene	RP
1195630019	Con-St-7	VMS19497	Naphthalene	RP

Manual Integration Reason Code Descriptions

Code	Description
O	Original Chromatogram
M	Modified Chromatogram
SS	Skimmed surrogate
BLG	Closed baseline gap
RP	Reassign peak name
PIR	Pattern integration required
IT	Included tail
SP	Split peak
RSP	Removed split peak
FPS	Forced peak start/stop
BLC	Baseline correction
PNF	Peak not found by software

All DRO/RRO analysis are integrated per SOP.

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, indemnification 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, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 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
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.

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
Gas-Disp-02	1195630001	09/17/2019	09/23/2019	Soil/Solid (dry weight)
Gas-Disp-01	1195630002	09/17/2019	09/23/2019	Soil/Solid (dry weight)
Sump-1	1195630003	09/17/2019	09/23/2019	Soil/Solid (dry weight)
EX-1	1195630004	09/17/2019	09/23/2019	Soil/Solid (dry weight)
EX-9	1195630005	09/17/2019	09/23/2019	Soil/Solid (dry weight)
EX-19	1195630006	09/17/2019	09/23/2019	Soil/Solid (dry weight)
EX-12	1195630007	09/17/2019	09/23/2019	Soil/Solid (dry weight)
EX-14	1195630008	09/17/2019	09/23/2019	Soil/Solid (dry weight)
NSW-6	1195630009	09/17/2019	09/23/2019	Solid/Soil (Wet Weight)
ESW-3	1195630010	09/17/2019	09/23/2019	Solid/Soil (Wet Weight)
SSW-1	1195630011	09/17/2019	09/23/2019	Soil/Solid (dry weight)
WSW-9	1195630012	09/17/2019	09/23/2019	Solid/Soil (Wet Weight)
Base-Test Pit	1195630013	09/17/2019	09/23/2019	Soil/Solid (dry weight)
St-1-7	1195630014	09/18/2019	09/23/2019	Soil/Solid (dry weight)
St-1-16	1195630015	09/18/2019	09/23/2019	Soil/Solid (dry weight)
St-1-22	1195630016	09/18/2019	09/23/2019	Soil/Solid (dry weight)
St-1-5	1195630017	09/18/2019	09/23/2019	Soil/Solid (dry weight)
Con-St-1	1195630018	09/18/2019	09/23/2019	Soil/Solid (dry weight)
Con-St-7	1195630019	09/18/2019	09/23/2019	Soil/Solid (dry weight)
Trip Blank	1195630020	09/17/2019	09/23/2019	Soil/Solid (dry weight)

<u>Method</u>	<u>Method Description</u>
8270D SIM (PAH)	8270 PAH SIM Semi-Volatiles GC/MS
AK102	Diesel Range Organics (S)
AK101	Gasoline Range Organics (S)
SW6020A	Metals by ICP-MS (S)
SM21 2540G	Percent Solids SM2540G
SW8260C-SIM	SW8260-SIM (S)
SW8260C	VOC 8260 (S) Field Extracted

Detectable Results Summary

Client Sample ID: **Gas-Disp-02**

Lab Sample ID: 1195630001

Metals by ICP/MS

Semivolatile Organic Fuels

Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	21.8	mg/Kg
Diesel Range Organics	91.9	mg/Kg
Tetrachloroethene	356	ug/Kg

Client Sample ID: **Gas-Disp-01**

Lab Sample ID: 1195630002

Metals by ICP/MS

Semivolatile Organic Fuels

Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	14.2	mg/Kg
Diesel Range Organics	2930	mg/Kg
Naphthalene	46.5	ug/Kg
Tetrachloroethene	17.0	ug/Kg

Client Sample ID: **Sump-1**

Lab Sample ID: 1195630003

Metals by ICP/MS

Semivolatile Organic Fuels

Volatile Fuels

Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	1.46	mg/Kg
Diesel Range Organics	5000	mg/Kg
Gasoline Range Organics	28.5	mg/Kg
1,3,5-Trimethylbenzene	820	ug/Kg
Tetrachloroethene	79.0	ug/Kg

Client Sample ID: **EX-1**

Lab Sample ID: 1195630004

Metals by ICP/MS

Semivolatile Organic Fuels

Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	33.7	mg/Kg
Diesel Range Organics	33.3	mg/Kg
Tetrachloroethene	129	ug/Kg

Client Sample ID: **EX-9**

Lab Sample ID: 1195630005

Metals by ICP/MS

Polynuclear Aromatics GC/MS

Semivolatile Organic Fuels

Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	11.2	mg/Kg
Benzo[g,h,i]perylene	27.2	ug/Kg
Diesel Range Organics	91.3	mg/Kg
Tetrachloroethene	11.9	ug/Kg

Client Sample ID: **EX-19**

Lab Sample ID: 1195630006

Metals by ICP/MS

Polynuclear Aromatics GC/MS

Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	10.9	mg/Kg
Benzo(a)Anthracene	30.3	ug/Kg
Benzo[a]pyrene	39.0	ug/Kg
Benzo[b]Fluoranthene	47.2	ug/Kg
Benzo[g,h,i]perylene	37.4	ug/Kg
Chrysene	37.0	ug/Kg
Fluoranthene	64.8	ug/Kg
Indeno[1,2,3-c,d] pyrene	31.8	ug/Kg
Phenanthrene	55.3	ug/Kg
Pyrene	63.1	ug/Kg
Diesel Range Organics	63.6	mg/Kg

Detectable Results Summary

Client Sample ID: **EX-12**
 Lab Sample ID: 1195630007

Metals by ICP/MS
Semivolatile Organic Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	5.61	mg/Kg
Diesel Range Organics	48.9	mg/Kg
Tetrachloroethene	15.0	ug/Kg

Client Sample ID: **EX-14**
 Lab Sample ID: 1195630008

Metals by ICP/MS
Semivolatile Organic Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	1.51	mg/Kg
Diesel Range Organics	31.6	mg/Kg
Tetrachloroethene	31.0	ug/Kg

Client Sample ID: **SSW-1**
 Lab Sample ID: 1195630011

Metals by ICP/MS
Polynuclear Aromatics GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	31.0	mg/Kg
2-Methylnaphthalene	65.7	ug/Kg
Benzo(a)Anthracene	45.6	ug/Kg
Benzo[a]pyrene	56.5	ug/Kg
Benzo[b]Fluoranthene	67.6	ug/Kg
Benzo[g,h,i]perylene	60.5	ug/Kg
Benzo[k]fluoranthene	26.1	ug/Kg
Chrysene	56.8	ug/Kg
Fluoranthene	97.0	ug/Kg
Indeno[1,2,3-c,d] pyrene	47.6	ug/Kg
Phenanthrene	69.7	ug/Kg
Pyrene	93.8	ug/Kg
Diesel Range Organics	693	mg/Kg
Gasoline Range Organics	51.3	mg/Kg
1,2,4-Trimethylbenzene	5720	ug/Kg
1,3,5-Trimethylbenzene	5570	ug/Kg
4-Isopropyltoluene	3490	ug/Kg
Ethylbenzene	347	ug/Kg
Isopropylbenzene (Cumene)	1100	ug/Kg
Naphthalene	388	ug/Kg
n-Butylbenzene	2170	ug/Kg
n-Propylbenzene	2350	ug/Kg
o-Xylene	3410	ug/Kg
P & M -Xylene	3420	ug/Kg
sec-Butylbenzene	1610	ug/Kg
tert-Butylbenzene	95.1	ug/Kg
Xylenes (total)	6830	ug/Kg

Semivolatile Organic Fuels
Volatile Fuels
Volatile GC/MS

Client Sample ID: **Base-Test Pit**
 Lab Sample ID: 1195630013

Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Diesel Range Organics	75.2	mg/Kg

Detectable Results Summary

Client Sample ID: **St-1-7**
 Lab Sample ID: 1195630014

Metals by ICP/MS
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	15.3	mg/Kg
Tetrachloroethene	156	ug/Kg

Client Sample ID: **St-1-16**
 Lab Sample ID: 1195630015

Metals by ICP/MS
Semivolatile Organic Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	16.0	mg/Kg
Diesel Range Organics	24.6	mg/Kg
Tetrachloroethene	33.6	ug/Kg

Client Sample ID: **St-1-22**
 Lab Sample ID: 1195630016

Metals by ICP/MS
Semivolatile Organic Fuels
Volatile Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	11.1	mg/Kg
Diesel Range Organics	74.0	mg/Kg
Gasoline Range Organics	2.16	mg/Kg
1,2,4-Trimethylbenzene	136	ug/Kg
1,3,5-Trimethylbenzene	131	ug/Kg
n-Propylbenzene	22.2	ug/Kg
o-Xylene	75.6	ug/Kg
P & M -Xylene	54.5	ug/Kg
sec-Butylbenzene	20.9	ug/Kg
Tetrachloroethene	95.9	ug/Kg
Xylenes (total)	130	ug/Kg

Client Sample ID: **St-1-5**
 Lab Sample ID: 1195630017

Metals by ICP/MS
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	10.8	mg/Kg
Tetrachloroethene	107	ug/Kg

Client Sample ID: **Con-St-1**
 Lab Sample ID: 1195630018

Metals by ICP/MS
Semivolatile Organic Fuels
Volatile Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	4.37	mg/Kg
Diesel Range Organics	1010	mg/Kg
Gasoline Range Organics	13.2	mg/Kg
1,2,4-Trimethylbenzene	442	ug/Kg
1,3,5-Trimethylbenzene	763	ug/Kg
4-Isopropyltoluene	171	ug/Kg
Naphthalene	88.0	ug/Kg
o-Xylene	149	ug/Kg
Tetrachloroethene	18.3	ug/Kg
Xylenes (total)	163	ug/Kg

Detectable Results Summary

Client Sample ID: **Con-St-7**

Lab Sample ID: 1195630019

Metals by ICP/MS

Semivolatile Organic Fuels

Volatile Fuels

Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	12.5	mg/Kg
Diesel Range Organics	182	mg/Kg
Gasoline Range Organics	5.13	mg/Kg
1,2,4-Trimethylbenzene	396	ug/Kg
1,3,5-Trimethylbenzene	325	ug/Kg
4-Isopropyltoluene	258	ug/Kg
Naphthalene	50.3	ug/Kg
n-Propylbenzene	40.5	ug/Kg
o-Xylene	65.0	ug/Kg
sec-Butylbenzene	69.2	ug/Kg
Tetrachloroethene	35.6	ug/Kg
Xylenes (total)	107	ug/Kg

Print Date: 10/25/2019 4:15:16PM



Results of Gas-Disp-02

Client Sample ID: **Gas-Disp-02**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630001
Lab Project ID: 1195630

Collection Date: 09/17/19 08:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):92.5
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	21.8	0.199	0.0618	mg/Kg	10		09/26/19 19:37

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:37
Container ID: 1195630001-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.084 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-02

Client Sample ID: **Gas-Disp-02**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630001
Lab Project ID: 1195630

Collection Date: 09/17/19 08:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):92.5
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	91.9	21.5	6.65	mg/Kg	1		10/02/19 19:17
Surrogates							
5a Androstane (surr)	89.2	50-150		%	1		10/02/19 19:17

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 19:17
Container ID: 1195630001-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.224 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-02

Client Sample ID: **Gas-Disp-02**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630001
Lab Project ID: 1195630

Collection Date: 09/17/19 08:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):92.5
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	1.83 U	1.83	0.549	mg/Kg	1		10/03/19 16:30
Surrogates							
4-Bromofluorobenzene (surr)	98.5	50-150		%	1		10/03/19 16:30

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/03/19 16:30
Container ID: 1195630001-B

Prep Batch: VXX35005
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:16
Prep Initial Wt./Vol.: 94.823 g
Prep Extract Vol: 32.084 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-02

Client Sample ID: Gas-Disp-02
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630001
Lab Project ID: 1195630

Collection Date: 09/17/19 08:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):92.5
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-02

Client Sample ID: Gas-Disp-02
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630001
Lab Project ID: 1195630

Collection Date: 09/17/19 08:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):92.5
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM

Results of Gas-Disp-02

Client Sample ID: **Gas-Disp-02**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630001
Lab Project ID: 1195630

Collection Date: 09/17/19 08:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):92.5
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 16:27
Container ID: 1195630001-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:16
Prep Initial Wt./Vol.: 94.823 g
Prep Extract Vol: 32.084 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-01

Client Sample ID: **Gas-Disp-01**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630002
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):89.8
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	14.2	0.213	0.0660	mg/Kg	10		09/26/19 19:42

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:42
Container ID: 1195630002-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.046 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-01

Client Sample ID: **Gas-Disp-01**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630002
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):89.8
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	2930		87.7	27.2	mg/Kg	4		10/03/19 02:38
Surrogates								
5a Androstane (surr)	105		50-150		%	4		10/03/19 02:38

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/03/19 02:38
Container ID: 1195630002-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.478 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-01

Client Sample ID: **Gas-Disp-01**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630002
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):89.8
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	2.29 U	2.29	0.687	mg/Kg	1		10/03/19 16:47
Surrogates							
4-Bromofluorobenzene (surr)	89.6	50-150		%	1		10/03/19 16:47

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/03/19 16:47
Container ID: 1195630002-B

Prep Batch: VXX35005
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:05
Prep Initial Wt./Vol.: 80.864 g
Prep Extract Vol: 33.2633 mL

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-01

Client Sample ID: Gas-Disp-01
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630002
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):89.8
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of Gas-Disp-01

Client Sample ID: **Gas-Disp-01**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630002
 Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):89.8
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	183 U	183	56.8	ug/Kg	1		09/24/19 16:43
Chloroform	1.83 U	1.83	0.568	ug/Kg	1		09/24/19 16:43
Chloromethane	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
cis-1,2-Dichloroethene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
cis-1,3-Dichloropropene	11.5 U	11.5	3.57	ug/Kg	1		09/24/19 16:43
Dibromochloromethane	1.83 U	1.83	0.568	ug/Kg	1		09/24/19 16:43
Dibromomethane	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
Dichlorodifluoromethane	45.8 U	45.8	13.7	ug/Kg	1		09/24/19 16:43
Ethylbenzene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
Freon-113	91.6 U	91.6	28.4	ug/Kg	1		09/24/19 16:43
Hexachlorobutadiene	18.3 U	18.3	5.68	ug/Kg	1		09/24/19 16:43
Isopropylbenzene (Cumene)	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
Methylene chloride	91.6 U	91.6	28.4	ug/Kg	1		09/24/19 16:43
Methyl-t-butyl ether	91.6 U	91.6	28.4	ug/Kg	1		09/24/19 16:43
Naphthalene	46.5	22.9	7.15	ug/Kg	1		09/24/19 16:43
n-Butylbenzene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
n-Propylbenzene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
o-Xylene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
P & M -Xylene	45.8 U	45.8	13.7	ug/Kg	1		09/24/19 16:43
sec-Butylbenzene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
Styrene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
tert-Butylbenzene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
Tetrachloroethene	17.0	11.5	3.57	ug/Kg	1		09/24/19 16:43
Toluene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
trans-1,2-Dichloroethene	22.9 U	22.9	7.15	ug/Kg	1		09/24/19 16:43
trans-1,3-Dichloropropene	11.5 U	11.5	3.57	ug/Kg	1		09/24/19 16:43
Trichloroethene	4.58 U	4.58	1.37	ug/Kg	1		09/24/19 16:43
Trichlorofluoromethane	45.8 U	45.8	13.7	ug/Kg	1		09/24/19 16:43
Vinyl acetate	91.6 U	91.6	28.4	ug/Kg	1		09/24/19 16:43
Vinyl chloride	0.733 U	0.733	0.229	ug/Kg	1		09/24/19 16:43
Xylenes (total)	68.7 U	68.7	20.9	ug/Kg	1		09/24/19 16:43
Surrogates							
1,2-Dichloroethane-D4 (surr)	117	71-136		%	1		09/24/19 16:43
4-Bromofluorobenzene (surr)	126	55-151		%	1		09/24/19 16:43
Toluene-d8 (surr)	99.2	85-116		%	1		09/24/19 16:43

Print Date: 10/25/2019 4:15:17PM

Results of Gas-Disp-01

Client Sample ID: **Gas-Disp-01**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630002
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):89.8
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 16:43
Container ID: 1195630002-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:05
Prep Initial Wt./Vol.: 80.864 g
Prep Extract Vol: 33.2633 mL

Print Date: 10/25/2019 4:15:17PM



Results of Sump-1

Client Sample ID: **Sump-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630003
Lab Project ID: 1195630

Collection Date: 09/17/19 09:45
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.9
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	1.46	0.188	0.0583	mg/Kg	10		09/26/19 19:47

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:47
Container ID: 1195630003-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.097 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of Sump-1

Client Sample ID: **Sump-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630003
Lab Project ID: 1195630

Collection Date: 09/17/19 09:45
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.9
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	5000		81.9	25.4	mg/Kg	4		10/03/19 02:28
Surrogates								
5a Androstane (surr)	130		50-150		%	4		10/03/19 02:28

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/03/19 02:28
Container ID: 1195630003-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.228 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of Sump-1

Client Sample ID: **Sump-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630003
Lab Project ID: 1195630

Collection Date: 09/17/19 09:45
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.9
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	28.5		1.46	0.439	mg/Kg	1		10/03/19 17:05
Surrogates								
4-Bromofluorobenzene (surr)	549	*	50-150		%	1		10/03/19 17:05

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/03/19 17:05
Container ID: 1195630003-C

Prep Batch: VXX35005
Prep Method: SW5035A
Prep Date/Time: 09/17/19 09:45
Prep Initial Wt./Vol.: 98.748 g
Prep Extract Vol: 28.0244 mL

Print Date: 10/25/2019 4:15:17PM



Results of Sump-1

Client Sample ID: **Sump-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630003
 Lab Project ID: 1195630

Collection Date: 09/17/19 09:45
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):96.9
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	117 U	117	36.3	ug/Kg	10		09/24/19 19:25
1,1,1-Trichloroethane	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,1,2,2-Tetrachloroethane	11.7 U	11.7	3.63	ug/Kg	10		09/24/19 19:25
1,1,2-Trichloroethane	4.68 U	4.68	1.46	ug/Kg	10		09/24/19 19:25
1,1-Dichloroethane	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,1-Dichloroethene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,1-Dichloropropene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,2,3-Trichlorobenzene	293 U	293	87.8	ug/Kg	10		09/24/19 19:25
1,2,3-Trichloropropane	5.86 U	5.86	1.82	ug/Kg	10		09/24/19 19:25
1,2,4-Trichlorobenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,2,4-Trimethylbenzene	293 U	293	87.8	ug/Kg	10		09/24/19 19:25
1,2-Dibromo-3-chloropropane	586 U	586	182	ug/Kg	10		09/24/19 19:25
1,2-Dibromoethane	5.86 U	5.86	1.82	ug/Kg	10		09/24/19 19:25
1,2-Dichlorobenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,2-Dichloroethane	11.7 U	11.7	3.63	ug/Kg	10		09/24/19 19:25
1,2-Dichloropropane	58.6 U	58.6	18.2	ug/Kg	10		09/24/19 19:25
1,3,5-Trimethylbenzene	820	146	45.7	ug/Kg	10		09/24/19 19:25
1,3-Dichlorobenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
1,3-Dichloropropane	58.6 U	58.6	18.2	ug/Kg	10		09/24/19 19:25
1,4-Dichlorobenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
2,2-Dichloropropane	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
2-Butanone (MEK)	1460 U	1460	457	ug/Kg	10		09/24/19 19:25
2-Chlorotoluene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
2-Hexanone	586 U	586	182	ug/Kg	10		09/24/19 19:25
4-Chlorotoluene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
4-Isopropyltoluene	586 U	586	146	ug/Kg	10		09/24/19 19:25
4-Methyl-2-pentanone (MIBK)	1460 U	1460	457	ug/Kg	10		09/24/19 19:25
Acetone	1460 U	1460	457	ug/Kg	10		09/24/19 19:25
Benzene	73.2 U	73.2	22.8	ug/Kg	10		09/24/19 19:25
Bromobenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Bromochloromethane	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Bromodichloromethane	11.7 U	11.7	3.63	ug/Kg	10		09/24/19 19:25
Bromoform	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Bromomethane	117 U	117	36.3	ug/Kg	10		09/24/19 19:25
Carbon disulfide	586 U	586	182	ug/Kg	10		09/24/19 19:25
Carbon tetrachloride	73.2 U	73.2	22.8	ug/Kg	10		09/24/19 19:25
Chlorobenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25

Print Date: 10/25/2019 4:15:17PM



Results of Sump-1

Client Sample ID: **Sump-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630003
 Lab Project ID: 1195630

Collection Date: 09/17/19 09:45
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):96.9
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	1170 U	1170	363	ug/Kg	10		09/24/19 19:25
Chloroform	11.7 U	11.7	3.63	ug/Kg	10		09/24/19 19:25
Chloromethane	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
cis-1,2-Dichloroethene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
cis-1,3-Dichloropropene	73.2 U	73.2	22.8	ug/Kg	10		09/24/19 19:25
Dibromochloromethane	11.7 U	11.7	3.63	ug/Kg	10		09/24/19 19:25
Dibromomethane	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Dichlorodifluoromethane	293 U	293	87.8	ug/Kg	10		09/24/19 19:25
Ethylbenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Freon-113	586 U	586	182	ug/Kg	10		09/24/19 19:25
Hexachlorobutadiene	117 U	117	36.3	ug/Kg	10		09/24/19 19:25
Isopropylbenzene (Cumene)	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Methylene chloride	586 U	586	182	ug/Kg	10		09/24/19 19:25
Methyl-t-butyl ether	586 U	586	182	ug/Kg	10		09/24/19 19:25
Naphthalene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
n-Butylbenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
n-Propylbenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
o-Xylene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
P & M -Xylene	293 U	293	87.8	ug/Kg	10		09/24/19 19:25
sec-Butylbenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Styrene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
tert-Butylbenzene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
Tetrachloroethene	79.0	73.2	22.8	ug/Kg	10		09/24/19 19:25
Toluene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
trans-1,2-Dichloroethene	146 U	146	45.7	ug/Kg	10		09/24/19 19:25
trans-1,3-Dichloropropene	73.2 U	73.2	22.8	ug/Kg	10		09/24/19 19:25
Trichloroethene	29.3 U	29.3	8.78	ug/Kg	10		09/24/19 19:25
Trichlorofluoromethane	293 U	293	87.8	ug/Kg	10		09/24/19 19:25
Vinyl acetate	586 U	586	182	ug/Kg	10		09/24/19 19:25
Vinyl chloride	4.68 U	4.68	1.46	ug/Kg	10		09/24/19 19:25
Xylenes (total)	439 U	439	134	ug/Kg	10		09/24/19 19:25
Surrogates							
1,2-Dichloroethane-D4 (surr)	103	71-136		%	10		09/24/19 19:25
4-Bromofluorobenzene (surr)	234 *	55-151		%	10		09/24/19 19:25
Toluene-d8 (surr)	102	85-116		%	10		09/24/19 19:25

Print Date: 10/25/2019 4:15:17PM

Results of Sump-1

Client Sample ID: **Sump-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630003
Lab Project ID: 1195630

Collection Date: 09/17/19 09:45
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.9
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 19:25
Container ID: 1195630003-C

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 09:45
Prep Initial Wt./Vol.: 98.748 g
Prep Extract Vol: 28.0244 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-1

Client Sample ID: **EX-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630004
Lab Project ID: 1195630

Collection Date: 09/17/19 16:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):90.5
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	33.7	0.208	0.0645	mg/Kg	10		09/26/19 19:51

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:51
Container ID: 1195630004-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.063 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of **EX-1**

Client Sample ID: **EX-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630004
Lab Project ID: 1195630

Collection Date: 09/17/19 16:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):90.5
Location:

Results by **Semivolatile Organic Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	33.3		22.1	6.84	mg/Kg	1		10/02/19 19:27
Surrogates								
5a Androstane (surr)	89.9		50-150		%	1		10/02/19 19:27

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 19:27
Container ID: 1195630004-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.064 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-1

Client Sample ID: **EX-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630004
Lab Project ID: 1195630

Collection Date: 09/17/19 16:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):90.5
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	2.15 U	2.15	0.644	mg/Kg	1		10/03/19 17:40
Surrogates							
4-Bromofluorobenzene (surr)	107	50-150		%	1		10/03/19 17:40

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/03/19 17:40
Container ID: 1195630004-B

Prep Batch: VXX35005
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:16
Prep Initial Wt./Vol.: 85.417 g
Prep Extract Vol: 33.1543 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-1

Client Sample ID: EX-1
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630004
Lab Project ID: 1195630

Collection Date: 09/17/19 16:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):90.5
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of EX-1

Client Sample ID: **EX-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630004
 Lab Project ID: 1195630

Collection Date: 09/17/19 16:16
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):90.5
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	172 U	172	53.2	ug/Kg	1		09/24/19 17:00
Chloroform	1.72 U	1.72	0.532	ug/Kg	1		09/24/19 17:00
Chloromethane	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
cis-1,2-Dichloroethene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
cis-1,3-Dichloropropene	10.7 U	10.7	3.35	ug/Kg	1		09/24/19 17:00
Dibromochloromethane	1.72 U	1.72	0.532	ug/Kg	1		09/24/19 17:00
Dibromomethane	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
Dichlorodifluoromethane	42.9 U	42.9	12.9	ug/Kg	1		09/24/19 17:00
Ethylbenzene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
Freon-113	85.8 U	85.8	26.6	ug/Kg	1		09/24/19 17:00
Hexachlorobutadiene	17.2 U	17.2	5.32	ug/Kg	1		09/24/19 17:00
Isopropylbenzene (Cumene)	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
Methylene chloride	85.8 U	85.8	26.6	ug/Kg	1		09/24/19 17:00
Methyl-t-butyl ether	85.8 U	85.8	26.6	ug/Kg	1		09/24/19 17:00
Naphthalene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
n-Butylbenzene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
n-Propylbenzene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
o-Xylene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
P & M -Xylene	42.9 U	42.9	12.9	ug/Kg	1		09/24/19 17:00
sec-Butylbenzene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
Styrene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
tert-Butylbenzene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
Tetrachloroethene	129	10.7	3.35	ug/Kg	1		09/24/19 17:00
Toluene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
trans-1,2-Dichloroethene	21.5 U	21.5	6.69	ug/Kg	1		09/24/19 17:00
trans-1,3-Dichloropropene	10.7 U	10.7	3.35	ug/Kg	1		09/24/19 17:00
Trichloroethene	4.29 U	4.29	1.29	ug/Kg	1		09/24/19 17:00
Trichlorofluoromethane	42.9 U	42.9	12.9	ug/Kg	1		09/24/19 17:00
Vinyl acetate	85.8 U	85.8	26.6	ug/Kg	1		09/24/19 17:00
Vinyl chloride	0.687 U	0.687	0.215	ug/Kg	1		09/24/19 17:00
Xylenes (total)	64.4 U	64.4	19.6	ug/Kg	1		09/24/19 17:00
Surrogates							
1,2-Dichloroethane-D4 (surr)	110	71-136		%	1		09/24/19 17:00
4-Bromofluorobenzene (surr)	141	55-151		%	1		09/24/19 17:00
Toluene-d8 (surr)	101	85-116		%	1		09/24/19 17:00

Print Date: 10/25/2019 4:15:17PM



Results of **EX-1**

Client Sample ID: **EX-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630004
Lab Project ID: 1195630

Collection Date: 09/17/19 16:16
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):90.5
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 17:00
Container ID: 1195630004-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:16
Prep Initial Wt./Vol.: 85.417 g
Prep Extract Vol: 33.1543 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-9

Client Sample ID: **EX-9**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	11.2	0.197	0.0611	mg/Kg	10		09/26/19 19:56

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:56
Container ID: 1195630005-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.076 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-9

Client Sample ID: EX-9
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Polynuclear Aromatics GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various polynuclear aromatic hydrocarbons and their surrogate compounds with associated values and analysis dates.

Batch Information

Analytical Batch: XMS11756
Analytical Method: 8270D SIM (PAH)
Analyst: DSD
Analytical Date/Time: 09/29/19 23:41
Container ID: 1195630005-A

Prep Batch: XXX42341
Prep Method: SW3550C
Prep Date/Time: 09/25/19 20:53
Prep Initial Wt./Vol.: 22.706 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-9

Client Sample ID: **EX-9**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	91.3		21.1	6.53	mg/Kg	1		10/02/19 19:37
Surrogates								
5a Androstane (surr)	89.3		50-150		%	1		10/02/19 19:37

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 19:37
Container ID: 1195630005-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.188 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM

Results of EX-9

Client Sample ID: **EX-9**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630005
 Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):94.3
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	1.61 U	1.61	0.483	mg/Kg	1		10/03/19 17:58
Surrogates							
4-Bromofluorobenzene (surr)	93	50-150		%	1		10/03/19 17:58

Batch Information

Analytical Batch: VFC14972
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 10/03/19 17:58
 Container ID: 1195630005-C

Prep Batch: VXX35005
 Prep Method: SW5035A
 Prep Date/Time: 09/17/19 16:20
 Prep Initial Wt./Vol.: 101.426 g
 Prep Extract Vol: 30.7845 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-9

Client Sample ID: EX-9
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of EX-9

Client Sample ID: EX-9
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical parameters like Chloroethane, Chloroform, etc., with their respective values and limits.

Print Date: 10/25/2019 4:15:17PM

Results of EX-9

Client Sample ID: **EX-9**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 17:16
Container ID: 1195630005-C

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:20
Prep Initial Wt./Vol.: 101.426 g
Prep Extract Vol: 30.7845 mL

Print Date: 10/25/2019 4:15:17PM



Results of **EX-9**

Client Sample ID: **EX-9**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630005
Lab Project ID: 1195630

Collection Date: 09/17/19 16:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by **Volatile-SIM**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,2-Dibromoethane	0.0805 U	0.0805	0.0200	ug/Kg	1		09/29/19 23:19

Surrogates

4-Bromofluorobenzene (surr)	92.1	55-151		%	1		09/29/19 23:19
Toluene-d8 (surr)	96.3	85-116		%	1		09/29/19 23:19

Batch Information

Analytical Batch: VMS19503
Analytical Method: SW8260C-SIM
Analyst: NRB
Analytical Date/Time: 09/29/19 23:19
Container ID: 1195630005-C

Prep Batch: VXX34979
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:20
Prep Initial Wt./Vol.: 101.426 g
Prep Extract Vol: 30.7845 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: **EX-19**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	10.9	0.196	0.0607	mg/Kg	10		09/26/19 20:01

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 20:01
Container ID: 1195630006-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.076 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: EX-19
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Polynuclear Aromatics GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various polynuclear aromatic hydrocarbons and their detection results.

Batch Information

Analytical Batch: XMS11756
Analytical Method: 8270D SIM (PAH)
Analyst: DSD
Analytical Date/Time: 09/30/19 00:02
Container ID: 1195630006-A

Prep Batch: XXX42341
Prep Method: SW3550C
Prep Date/Time: 09/25/19 20:53
Prep Initial Wt./Vol.: 22.955 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: **EX-19**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	63.6		20.7	6.43	mg/Kg	1		10/02/19 19:47
Surrogates								
5a Androstane (surr)	84.7		50-150		%	1		10/02/19 19:47

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 19:47
Container ID: 1195630006-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.493 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: **EX-19**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	1.70 U	1.70	0.509	mg/Kg	1		10/03/19 18:15
Surrogates							
4-Bromofluorobenzene (surr)	88.4	50-150		%	1		10/03/19 18:15

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/03/19 18:15
Container ID: 1195630006-C

Prep Batch: VXX35005
Prep Method: SW5035A
Prep Date/Time: 09/17/19 19:20
Prep Initial Wt./Vol.: 92.102 g
Prep Extract Vol: 29.6668 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: EX-19
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: **EX-19**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630006
 Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):94.9
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	136 U	136	42.1	ug/Kg	1		09/24/19 17:32
Chloroform	1.36 U	1.36	0.421	ug/Kg	1		09/24/19 17:32
Chloromethane	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
cis-1,2-Dichloroethene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
cis-1,3-Dichloropropene	8.48 U	8.48	2.65	ug/Kg	1		09/24/19 17:32
Dibromochloromethane	1.36 U	1.36	0.421	ug/Kg	1		09/24/19 17:32
Dibromomethane	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
Dichlorodifluoromethane	33.9 U	33.9	10.2	ug/Kg	1		09/24/19 17:32
Ethylbenzene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
Freon-113	67.9 U	67.9	21.0	ug/Kg	1		09/24/19 17:32
Hexachlorobutadiene	13.6 U	13.6	4.21	ug/Kg	1		09/24/19 17:32
Isopropylbenzene (Cumene)	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
Methylene chloride	67.9 U	67.9	21.0	ug/Kg	1		09/24/19 17:32
Methyl-t-butyl ether	67.9 U	67.9	21.0	ug/Kg	1		09/24/19 17:32
Naphthalene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
n-Butylbenzene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
n-Propylbenzene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
o-Xylene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
P & M -Xylene	33.9 U	33.9	10.2	ug/Kg	1		09/24/19 17:32
sec-Butylbenzene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
Styrene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
tert-Butylbenzene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
Tetrachloroethene	8.48 U	8.48	2.65	ug/Kg	1		09/24/19 17:32
Toluene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
trans-1,2-Dichloroethene	17.0 U	17.0	5.29	ug/Kg	1		09/24/19 17:32
trans-1,3-Dichloropropene	8.48 U	8.48	2.65	ug/Kg	1		09/24/19 17:32
Trichloroethene	3.39 U	3.39	1.02	ug/Kg	1		09/24/19 17:32
Trichlorofluoromethane	33.9 U	33.9	10.2	ug/Kg	1		09/24/19 17:32
Vinyl acetate	67.9 U	67.9	21.0	ug/Kg	1		09/24/19 17:32
Vinyl chloride	0.543 U	0.543	0.170	ug/Kg	1		09/24/19 17:32
Xylenes (total)	50.9 U	50.9	15.5	ug/Kg	1		09/24/19 17:32
Surrogates							
1,2-Dichloroethane-D4 (surr)	110	71-136		%	1		09/24/19 17:32
4-Bromofluorobenzene (surr)	118	55-151		%	1		09/24/19 17:32
Toluene-d8 (surr)	99.9	85-116		%	1		09/24/19 17:32

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: **EX-19**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 17:32
Container ID: 1195630006-C

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 19:20
Prep Initial Wt./Vol.: 92.102 g
Prep Extract Vol: 29.6668 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-19

Client Sample ID: **EX-19**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630006
Lab Project ID: 1195630

Collection Date: 09/17/19 19:20
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.9
Location:

Results by Volatile-SIM

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,2-Dibromoethane	0.0848 U	0.0848	0.0210	ug/Kg	1		09/29/19 23:34
Surrogates							
4-Bromofluorobenzene (surr)	89.6	55-151		%	1		09/29/19 23:34
Toluene-d8 (surr)	98.3	85-116		%	1		09/29/19 23:34

Batch Information

Analytical Batch: VMS19503
Analytical Method: SW8260C-SIM
Analyst: NRB
Analytical Date/Time: 09/29/19 23:34
Container ID: 1195630006-C

Prep Batch: VXX34979
Prep Method: SW5035A
Prep Date/Time: 09/17/19 19:20
Prep Initial Wt./Vol.: 92.102 g
Prep Extract Vol: 29.6668 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-12

Client Sample ID: **EX-12**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630007
Lab Project ID: 1195630

Collection Date: 09/17/19 16:25
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.0
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	5.61	0.195	0.0604	mg/Kg	10		09/26/19 18:46

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 18:46
Container ID: 1195630007-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.08 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-12

Client Sample ID: EX-12
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630007
Lab Project ID: 1195630

Collection Date: 09/17/19 16:25
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.0
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	48.9	20.9	6.49	mg/Kg	1		10/02/19 19:57
Surrogates							
5a Androstane (surr)	88.1	50-150		%	1		10/02/19 19:57

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 19:57
Container ID: 1195630007-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.154 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-12

Client Sample ID: EX-12
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630007
Lab Project ID: 1195630

Collection Date: 09/17/19 16:25
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.0
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	1.89 U	1.89	0.568	mg/Kg	1		10/04/19 00:06
Surrogates							
4-Bromofluorobenzene (surr)	90.2	50-150		%	1		10/04/19 00:06

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 00:06
Container ID: 1195630007-B

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:25
Prep Initial Wt./Vol.: 80.759 g
Prep Extract Vol: 29.0441 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-12

Client Sample ID: EX-12
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630007
Lab Project ID: 1195630

Collection Date: 09/17/19 16:25
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.0
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of EX-12

Client Sample ID: **EX-12**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630007
 Lab Project ID: 1195630

Collection Date: 09/17/19 16:25
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):95.0
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	151 U	151	46.9	ug/Kg	1		09/24/19 17:48
Chloroform	1.51 U	1.51	0.469	ug/Kg	1		09/24/19 17:48
Chloromethane	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
cis-1,2-Dichloroethene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
cis-1,3-Dichloropropene	9.46 U	9.46	2.95	ug/Kg	1		09/24/19 17:48
Dibromochloromethane	1.51 U	1.51	0.469	ug/Kg	1		09/24/19 17:48
Dibromomethane	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
Dichlorodifluoromethane	37.9 U	37.9	11.4	ug/Kg	1		09/24/19 17:48
Ethylbenzene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
Freon-113	75.7 U	75.7	23.5	ug/Kg	1		09/24/19 17:48
Hexachlorobutadiene	15.1 U	15.1	4.69	ug/Kg	1		09/24/19 17:48
Isopropylbenzene (Cumene)	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
Methylene chloride	75.7 U	75.7	23.5	ug/Kg	1		09/24/19 17:48
Methyl-t-butyl ether	75.7 U	75.7	23.5	ug/Kg	1		09/24/19 17:48
Naphthalene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
n-Butylbenzene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
n-Propylbenzene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
o-Xylene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
P & M -Xylene	37.9 U	37.9	11.4	ug/Kg	1		09/24/19 17:48
sec-Butylbenzene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
Styrene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
tert-Butylbenzene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
Tetrachloroethene	15.0	9.46	2.95	ug/Kg	1		09/24/19 17:48
Toluene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
trans-1,2-Dichloroethene	18.9 U	18.9	5.91	ug/Kg	1		09/24/19 17:48
trans-1,3-Dichloropropene	9.46 U	9.46	2.95	ug/Kg	1		09/24/19 17:48
Trichloroethene	3.79 U	3.79	1.14	ug/Kg	1		09/24/19 17:48
Trichlorofluoromethane	37.9 U	37.9	11.4	ug/Kg	1		09/24/19 17:48
Vinyl acetate	75.7 U	75.7	23.5	ug/Kg	1		09/24/19 17:48
Vinyl chloride	0.606 U	0.606	0.189	ug/Kg	1		09/24/19 17:48
Xylenes (total)	56.8 U	56.8	17.3	ug/Kg	1		09/24/19 17:48
Surrogates							
1,2-Dichloroethane-D4 (surr)	111	71-136		%	1		09/24/19 17:48
4-Bromofluorobenzene (surr)	125	55-151		%	1		09/24/19 17:48
Toluene-d8 (surr)	99.4	85-116		%	1		09/24/19 17:48

Print Date: 10/25/2019 4:15:17PM



Results of EX-12

Client Sample ID: **EX-12**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630007
Lab Project ID: 1195630

Collection Date: 09/17/19 16:25
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.0
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 17:48
Container ID: 1195630007-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:25
Prep Initial Wt./Vol.: 80.759 g
Prep Extract Vol: 29.0441 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-14

Client Sample ID: **EX-14**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630008
Lab Project ID: 1195630

Collection Date: 09/17/19 16:35
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):97.5
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	1.51	0.194	0.0602	mg/Kg	10		09/26/19 18:50

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 18:50
Container ID: 1195630008-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.055 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of **EX-14**

Client Sample ID: **EX-14**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630008
Lab Project ID: 1195630

Collection Date: 09/17/19 16:35
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):97.5
Location:

Results by **Semivolatile Organic Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	31.6		20.5	6.35	mg/Kg	1		10/02/19 20:07
Surrogates								
5a Androstane (surr)	87.9		50-150		%	1		10/02/19 20:07

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 20:07
Container ID: 1195630008-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.052 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-14

Client Sample ID: **EX-14**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630008
Lab Project ID: 1195630

Collection Date: 09/17/19 16:35
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):97.5
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	1.54 U	1.54	0.463	mg/Kg	1		10/04/19 00:24
Surrogates							
4-Bromofluorobenzene (surr)	89.3	50-150		%	1		10/04/19 00:24

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 00:24
Container ID: 1195630008-B

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:35
Prep Initial Wt./Vol.: 90.373 g
Prep Extract Vol: 27.2204 mL

Print Date: 10/25/2019 4:15:17PM



Results of EX-14

Client Sample ID: EX-14
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630008
Lab Project ID: 1195630

Collection Date: 09/17/19 16:35
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):97.5
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of EX-14

Client Sample ID: EX-14
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630008
Lab Project ID: 1195630

Collection Date: 09/17/19 16:35
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):97.5
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of EX-14

Client Sample ID: **EX-14**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630008
Lab Project ID: 1195630

Collection Date: 09/17/19 16:35
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):97.5
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 18:04
Container ID: 1195630008-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:35
Prep Initial Wt./Vol.: 90.373 g
Prep Extract Vol: 27.2204 mL

Print Date: 10/25/2019 4:15:17PM



Results of **SSW-1**

Client Sample ID: **SSW-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630011
Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	31.0	0.207	0.0642	mg/Kg	10		09/26/19 18:55

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 18:55
Container ID: 1195630011-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.039 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of SSW-1

Client Sample ID: **SSW-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630011
 Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):93.0
 Location:

Results by Polynuclear Aromatics GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1-Methylnaphthalene	24.2 U	24.2	6.04	ug/Kg	1		09/30/19 01:04
2-Methylnaphthalene	65.7	24.2	6.04	ug/Kg	1		09/30/19 01:04
Acenaphthene	24.2 U	24.2	6.04	ug/Kg	1		09/30/19 01:04
Acenaphthylene	24.2 U	24.2	6.04	ug/Kg	1		09/30/19 01:04
Anthracene	24.2 U	24.2	6.04	ug/Kg	1		09/30/19 01:04
Benzo(a)Anthracene	45.6	24.2	6.04	ug/Kg	1		09/30/19 01:04
Benzo[a]pyrene	56.5	24.2	6.04	ug/Kg	1		09/30/19 01:04
Benzo[b]Fluoranthene	67.6	24.2	6.04	ug/Kg	1		09/30/19 01:04
Benzo[g,h,i]perylene	60.5	24.2	6.04	ug/Kg	1		09/30/19 01:04
Benzo[k]fluoranthene	26.1	24.2	6.04	ug/Kg	1		09/30/19 01:04
Chrysene	56.8	24.2	6.04	ug/Kg	1		09/30/19 01:04
Dibenzo[a,h]anthracene	24.2 U	24.2	6.04	ug/Kg	1		09/30/19 01:04
Fluoranthene	97.0	24.2	6.04	ug/Kg	1		09/30/19 01:04
Fluorene	24.2 U	24.2	6.04	ug/Kg	1		09/30/19 01:04
Indeno[1,2,3-c,d] pyrene	47.6	24.2	6.04	ug/Kg	1		09/30/19 01:04
Naphthalene	19.3 U	19.3	4.83	ug/Kg	1		09/30/19 01:04
Phenanthrene	69.7	24.2	6.04	ug/Kg	1		09/30/19 01:04
Pyrene	93.8	24.2	6.04	ug/Kg	1		09/30/19 01:04
Surrogates							
2-Methylnaphthalene-d10 (surr)	83.9	58-103		%	1		09/30/19 01:04
Fluoranthene-d10 (surr)	73.8	54-113		%	1		09/30/19 01:04

Batch Information

Analytical Batch: XMS11756
 Analytical Method: 8270D SIM (PAH)
 Analyst: DSD
 Analytical Date/Time: 09/30/19 01:04
 Container ID: 1195630011-A

Prep Batch: XXX42341
 Prep Method: SW3550C
 Prep Date/Time: 09/25/19 20:53
 Prep Initial Wt./Vol.: 25.034 g
 Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of SSW-1

Client Sample ID: **SSW-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630011
Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	693	21.4	6.62	mg/Kg	1		10/02/19 20:17
Surrogates							
5a Androstane (surr)	93.3	50-150		%	1		10/02/19 20:17

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 20:17
Container ID: 1195630011-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.189 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM

Results of SSW-1

Client Sample ID: **SSW-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630011
 Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):93.0
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	51.3		1.83	0.549	mg/Kg	1		10/04/19 00:41
Surrogates								
4-Bromofluorobenzene (surr)	1220	*	50-150		%	1		10/04/19 00:41

Batch Information

Analytical Batch: VFC14972
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 10/04/19 00:41
 Container ID: 1195630011-B

Prep Batch: VXX35006
 Prep Method: SW5035A
 Prep Date/Time: 09/17/19 16:52
 Prep Initial Wt./Vol.: 92.44 g
 Prep Extract Vol: 31.4523 mL

Print Date: 10/25/2019 4:15:17PM



Results of SSW-1

Client Sample ID: **SSW-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630011
 Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):93.0
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	73.2 U	73.2	22.7	ug/Kg	5		09/25/19 22:19
1,1,1-Trichloroethane	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,1,2,2-Tetrachloroethane	7.32 U	7.32	2.27	ug/Kg	5		09/25/19 22:19
1,1,2-Trichloroethane	2.93 U	2.93	0.914	ug/Kg	5		09/25/19 22:19
1,1-Dichloroethane	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,1-Dichloroethene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,1-Dichloropropene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,2,3-Trichlorobenzene	183 U	183	54.9	ug/Kg	5		09/25/19 22:19
1,2,3-Trichloropropane	3.66 U	3.66	1.13	ug/Kg	5		09/25/19 22:19
1,2,4-Trichlorobenzene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,2,4-Trimethylbenzene	5720	366	110	ug/Kg	10		09/27/19 18:33
1,2-Dibromo-3-chloropropane	366 U	366	113	ug/Kg	5		09/25/19 22:19
1,2-Dibromoethane	3.66 U	3.66	1.13	ug/Kg	5		09/25/19 22:19
1,2-Dichlorobenzene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,2-Dichloroethane	7.32 U	7.32	2.27	ug/Kg	5		09/25/19 22:19
1,2-Dichloropropane	36.6 U	36.6	11.3	ug/Kg	5		09/25/19 22:19
1,3,5-Trimethylbenzene	5570	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,3-Dichlorobenzene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
1,3-Dichloropropane	36.6 U	36.6	11.3	ug/Kg	5		09/25/19 22:19
1,4-Dichlorobenzene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
2,2-Dichloropropane	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
2-Butanone (MEK)	914 U	914	285	ug/Kg	5		09/25/19 22:19
2-Chlorotoluene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
2-Hexanone	366 U	366	113	ug/Kg	5		09/25/19 22:19
4-Chlorotoluene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
4-Isopropyltoluene	3490	366	91.4	ug/Kg	5		09/25/19 22:19
4-Methyl-2-pentanone (MIBK)	914 U	914	285	ug/Kg	5		09/25/19 22:19
Acetone	914 U	914	285	ug/Kg	5		09/25/19 22:19
Benzene	45.7 U	45.7	14.3	ug/Kg	5		09/25/19 22:19
Bromobenzene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
Bromochloromethane	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
Bromodichloromethane	7.32 U	7.32	2.27	ug/Kg	5		09/25/19 22:19
Bromoform	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
Bromomethane	73.2 U	73.2	22.7	ug/Kg	5		09/25/19 22:19
Carbon disulfide	366 U	366	113	ug/Kg	5		09/25/19 22:19
Carbon tetrachloride	45.7 U	45.7	14.3	ug/Kg	5		09/25/19 22:19
Chlorobenzene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19

Print Date: 10/25/2019 4:15:17PM



Results of **SSW-1**

Client Sample ID: **SSW-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630011
Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	732 U	732	227	ug/Kg	5		09/25/19 22:19
Chloroform	14.6 U	14.6	4.54	ug/Kg	10		09/27/19 18:33
Chloromethane	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
cis-1,2-Dichloroethene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
cis-1,3-Dichloropropene	45.7 U	45.7	14.3	ug/Kg	5		09/25/19 22:19
Dibromochloromethane	7.32 U	7.32	2.27	ug/Kg	5		09/25/19 22:19
Dibromomethane	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
Dichlorodifluoromethane	183 U	183	54.9	ug/Kg	5		09/25/19 22:19
Ethylbenzene	347	91.4	28.5	ug/Kg	5		09/25/19 22:19
Freon-113	366 U	366	113	ug/Kg	5		09/25/19 22:19
Hexachlorobutadiene	73.2 U	73.2	22.7	ug/Kg	5		09/25/19 22:19
Isopropylbenzene (Cumene)	1100	91.4	28.5	ug/Kg	5		09/25/19 22:19
Methylene chloride	366 U	366	113	ug/Kg	5		09/25/19 22:19
Methyl-t-butyl ether	366 U	366	113	ug/Kg	5		09/25/19 22:19
Naphthalene	388	91.4	28.5	ug/Kg	5		09/25/19 22:19
n-Butylbenzene	2170	91.4	28.5	ug/Kg	5		09/25/19 22:19
n-Propylbenzene	2350	91.4	28.5	ug/Kg	5		09/25/19 22:19
o-Xylene	3410	91.4	28.5	ug/Kg	5		09/25/19 22:19
P & M -Xylene	3420	183	54.9	ug/Kg	5		09/25/19 22:19
sec-Butylbenzene	1610	91.4	28.5	ug/Kg	5		09/25/19 22:19
Styrene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
tert-Butylbenzene	95.1	91.4	28.5	ug/Kg	5		09/25/19 22:19
Tetrachloroethene	45.7 U	45.7	14.3	ug/Kg	5		09/25/19 22:19
Toluene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
trans-1,2-Dichloroethene	91.4 U	91.4	28.5	ug/Kg	5		09/25/19 22:19
trans-1,3-Dichloropropene	45.7 U	45.7	14.3	ug/Kg	5		09/25/19 22:19
Trichloroethene	18.3 U	18.3	5.49	ug/Kg	5		09/25/19 22:19
Trichlorofluoromethane	183 U	183	54.9	ug/Kg	5		09/25/19 22:19
Vinyl acetate	366 U	366	113	ug/Kg	5		09/25/19 22:19
Vinyl chloride	2.93 U	2.93	0.914	ug/Kg	5		09/25/19 22:19
Xylenes (total)	6830	274	83.4	ug/Kg	5		09/25/19 22:19
Surrogates							
1,2-Dichloroethane-D4 (surr)	109	71-136		%	5		09/25/19 22:19
4-Bromofluorobenzene (surr)	318	* 55-151		%	5		09/25/19 22:19
Toluene-d8 (surr)	96	85-116		%	5		09/25/19 22:19

Print Date: 10/25/2019 4:15:17PM



Results of **SSW-1**

Client Sample ID: **SSW-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630011
Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS19499
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/27/19 18:33
Container ID: 1195630011-B

Prep Batch: VXX34974
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:52
Prep Initial Wt./Vol.: 92.44 g
Prep Extract Vol: 31.4523 mL

Analytical Batch: VMS19497
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/25/19 22:19
Container ID: 1195630011-B

Prep Batch: VXX34970
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:52
Prep Initial Wt./Vol.: 92.44 g
Prep Extract Vol: 31.4523 mL

Print Date: 10/25/2019 4:15:17PM



Results of SSW-1

Client Sample ID: **SSW-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630011
Lab Project ID: 1195630

Collection Date: 09/17/19 16:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by Volatile-SIM

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,2-Dibromoethane	0.366 U	0.366	0.0907	ug/Kg	4		09/30/19 00:50
Surrogates							
4-Bromofluorobenzene (surr)	166 *	55-151		%	4		09/30/19 00:50
Toluene-d8 (surr)	92.9	85-116		%	4		09/30/19 00:50

Batch Information

Analytical Batch: VMS19503
Analytical Method: SW8260C-SIM
Analyst: NRB
Analytical Date/Time: 09/30/19 00:50
Container ID: 1195630011-B

Prep Batch: VXX34979
Prep Method: SW5035A
Prep Date/Time: 09/17/19 16:52
Prep Initial Wt./Vol.: 92.44 g
Prep Extract Vol: 31.4523 mL

Print Date: 10/25/2019 4:15:17PM



Results of Base-Test Pit

Client Sample ID: **Base-Test Pit**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630013
Lab Project ID: 1195630

Collection Date: 09/17/19 17:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.3
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	75.2	20.9	6.48	mg/Kg	1		10/02/19 20:27
Surrogates							
5a Androstane (surr)	93.9	50-150		%	1		10/02/19 20:27

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 20:27
Container ID: 1195630013-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.44 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-7**

Client Sample ID: **St-1-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630014
Lab Project ID: 1195630

Collection Date: 09/18/19 09:02
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	15.3	0.212	0.0657	mg/Kg	10		09/26/19 19:00

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:00
Container ID: 1195630014-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.015 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-7

Client Sample ID: **St-1-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630014
Lab Project ID: 1195630

Collection Date: 09/18/19 09:02
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	21.2 U	21.2	6.57	mg/Kg	1		10/02/19 20:37
Surrogates							
5a Androstane (surr)	88	50-150		%	1		10/02/19 20:37

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 20:37
Container ID: 1195630014-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.425 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-7**

Client Sample ID: **St-1-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630014
Lab Project ID: 1195630

Collection Date: 09/18/19 09:02
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Volatile Fuels**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	1.99 U	1.99	0.596	mg/Kg	1		10/04/19 00:59
Surrogates							
4-Bromofluorobenzene (surr)	115	50-150		%	1		10/04/19 00:59

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 00:59
Container ID: 1195630014-B

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:02
Prep Initial Wt./Vol.: 83.465 g
Prep Extract Vol: 30.8421 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-7**

Client Sample ID: **St-1-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630014
Lab Project ID: 1195630

Collection Date: 09/18/19 09:02
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1-Trichloroethane	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,1-Dichloroethane	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,2,3-Trichlorobenzene	39.7 U	39.7	11.9	ug/Kg	1		09/25/19 21:49
1,2,4-Trimethylbenzene	39.7 U	39.7	11.9	ug/Kg	1		09/25/19 21:49
1,2-Dichlorobenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,2-Dichloroethane	1.59 U	1.59	0.493	ug/Kg	1		09/25/19 21:49
1,2-Dichloropropane	7.95 U	7.95	2.46	ug/Kg	1		09/25/19 21:49
1,3,5-Trimethylbenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,1,1,2-Tetrachloroethane	15.9 U	15.9	4.93	ug/Kg	1		09/25/19 21:49
1,1,2,2-Tetrachloroethane	1.59 U	1.59	0.493	ug/Kg	1		09/25/19 21:49
1,1,2-Trichloroethane	0.636 U	0.636	0.199	ug/Kg	1		09/25/19 21:49
1,2-Dibromo-3-chloropropane	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
1,1-Dichloroethene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,1-Dichloropropene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,2-Dibromoethane	0.795 U	0.795	0.246	ug/Kg	1		09/25/19 21:49
1,2,3-Trichloropropane	0.795 U	0.795	0.246	ug/Kg	1		09/25/19 21:49
1,2,4-Trichlorobenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,3-Dichlorobenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
1,3-Dichloropropane	7.95 U	7.95	2.46	ug/Kg	1		09/25/19 21:49
1,4-Dichlorobenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
2,2-Dichloropropane	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
2-Butanone (MEK)	199 U	199	62.0	ug/Kg	1		09/25/19 21:49
2-Chlorotoluene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
2-Hexanone	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
4-Chlorotoluene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
4-Isopropyltoluene	79.5 U	79.5	19.9	ug/Kg	1		09/25/19 21:49
4-Methyl-2-pentanone (MIBK)	199 U	199	62.0	ug/Kg	1		09/25/19 21:49
Acetone	199 U	199	62.0	ug/Kg	1		09/25/19 21:49
Benzene	9.93 U	9.93	3.10	ug/Kg	1		09/25/19 21:49
Bromobenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Bromochloromethane	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Bromodichloromethane	1.59 U	1.59	0.493	ug/Kg	1		09/25/19 21:49
Bromoform	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Bromomethane	15.9 U	15.9	4.93	ug/Kg	1		09/25/19 21:49
Carbon disulfide	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
Carbon tetrachloride	9.93 U	9.93	3.10	ug/Kg	1		09/25/19 21:49
Chlorobenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49

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Results of **St-1-7**

Client Sample ID: **St-1-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630014
Lab Project ID: 1195630

Collection Date: 09/18/19 09:02
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	159 U	159	49.3	ug/Kg	1		09/25/19 21:49
Chloroform	1.59 U	1.59	0.493	ug/Kg	1		09/27/19 16:08
Chloromethane	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
cis-1,2-Dichloroethene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
cis-1,3-Dichloropropene	9.93 U	9.93	3.10	ug/Kg	1		09/25/19 21:49
Dibromochloromethane	1.59 U	1.59	0.493	ug/Kg	1		09/25/19 21:49
Dibromomethane	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Dichlorodifluoromethane	39.7 U	39.7	11.9	ug/Kg	1		09/25/19 21:49
Ethylbenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Freon-113	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
Hexachlorobutadiene	15.9 U	15.9	4.93	ug/Kg	1		09/25/19 21:49
Isopropylbenzene (Cumene)	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Methylene chloride	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
Methyl-t-butyl ether	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
Naphthalene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
n-Butylbenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
n-Propylbenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
o-Xylene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
P & M -Xylene	39.7 U	39.7	11.9	ug/Kg	1		09/25/19 21:49
sec-Butylbenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Styrene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
tert-Butylbenzene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
Tetrachloroethene	156	9.93	3.10	ug/Kg	1		09/25/19 21:49
Toluene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
trans-1,2-Dichloroethene	19.9 U	19.9	6.20	ug/Kg	1		09/25/19 21:49
trans-1,3-Dichloropropene	9.93 U	9.93	3.10	ug/Kg	1		09/25/19 21:49
Trichloroethene	3.97 U	3.97	1.19	ug/Kg	1		09/25/19 21:49
Trichlorofluoromethane	39.7 U	39.7	11.9	ug/Kg	1		09/25/19 21:49
Vinyl acetate	79.5 U	79.5	24.6	ug/Kg	1		09/25/19 21:49
Vinyl chloride	0.636 U	0.636	0.199	ug/Kg	1		09/25/19 21:49
Xylenes (total)	59.6 U	59.6	18.1	ug/Kg	1		09/25/19 21:49
Surrogates							
1,2-Dichloroethane-D4 (surr)	113	71-136		%	1		09/25/19 21:49
4-Bromofluorobenzene (surr)	111	55-151		%	1		09/25/19 21:49
Toluene-d8 (surr)	96.5	85-116		%	1		09/25/19 21:49

Print Date: 10/25/2019 4:15:17PM



Results of St-1-7

Client Sample ID: **St-1-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630014
Lab Project ID: 1195630

Collection Date: 09/18/19 09:02
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.0
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19499
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/27/19 16:08
Container ID: 1195630014-B

Prep Batch: VXX34974
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:02
Prep Initial Wt./Vol.: 83.465 g
Prep Extract Vol: 30.8421 mL

Analytical Batch: VMS19497
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/25/19 21:49
Container ID: 1195630014-B

Prep Batch: VXX34970
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:02
Prep Initial Wt./Vol.: 83.465 g
Prep Extract Vol: 30.8421 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-16

Client Sample ID: **St-1-16**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630015
Lab Project ID: 1195630

Collection Date: 09/18/19 09:19
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.4
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	16.0	0.197	0.0611	mg/Kg	10		09/26/19 19:04

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:04
Container ID: 1195630015-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.075 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-16

Client Sample ID: **St-1-16**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630015
Lab Project ID: 1195630

Collection Date: 09/18/19 09:19
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.4
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	24.6		21.1	6.55	mg/Kg	1		10/02/19 20:47
Surrogates								
5a Androstane (surr)	89.8		50-150		%	1		10/02/19 20:47

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 20:47
Container ID: 1195630015-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.088 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-16

Client Sample ID: **St-1-16**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630015
Lab Project ID: 1195630

Collection Date: 09/18/19 09:19
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.4
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	2.06 U	2.06	0.619	mg/Kg	1		10/04/19 01:17
Surrogates							
4-Bromofluorobenzene (surr)	91.1	50-150		%	1		10/04/19 01:17

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 01:17
Container ID: 1195630015-B

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:19
Prep Initial Wt./Vol.: 75.051 g
Prep Extract Vol: 29.2257 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-16**

Client Sample ID: **St-1-16**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630015
Lab Project ID: 1195630

Collection Date: 09/18/19 09:19
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.4
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	16.5 U	16.5	5.12	ug/Kg	1		09/24/19 18:53
1,1,1-Trichloroethane	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,1,2,2-Tetrachloroethane	1.65 U	1.65	0.512	ug/Kg	1		09/24/19 18:53
1,1,2-Trichloroethane	0.660 U	0.660	0.206	ug/Kg	1		09/24/19 18:53
1,1-Dichloroethane	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,1-Dichloroethene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,1-Dichloropropene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,2,3-Trichlorobenzene	41.3 U	41.3	12.4	ug/Kg	1		09/24/19 18:53
1,2,3-Trichloropropane	0.825 U	0.825	0.256	ug/Kg	1		09/24/19 18:53
1,2,4-Trichlorobenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,2,4-Trimethylbenzene	41.3 U	41.3	12.4	ug/Kg	1		09/24/19 18:53
1,2-Dibromo-3-chloropropane	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
1,2-Dibromoethane	0.825 U	0.825	0.256	ug/Kg	1		09/24/19 18:53
1,2-Dichlorobenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,2-Dichloroethane	1.65 U	1.65	0.512	ug/Kg	1		09/24/19 18:53
1,2-Dichloropropane	8.25 U	8.25	2.56	ug/Kg	1		09/24/19 18:53
1,3,5-Trimethylbenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,3-Dichlorobenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
1,3-Dichloropropane	8.25 U	8.25	2.56	ug/Kg	1		09/24/19 18:53
1,4-Dichlorobenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
2,2-Dichloropropane	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
2-Butanone (MEK)	206 U	206	64.4	ug/Kg	1		09/24/19 18:53
2-Chlorotoluene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
2-Hexanone	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
4-Chlorotoluene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
4-Isopropyltoluene	82.5 U	82.5	20.6	ug/Kg	1		09/24/19 18:53
4-Methyl-2-pentanone (MIBK)	206 U	206	64.4	ug/Kg	1		09/24/19 18:53
Acetone	206 U	206	64.4	ug/Kg	1		09/24/19 18:53
Benzene	10.3 U	10.3	3.22	ug/Kg	1		09/24/19 18:53
Bromobenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Bromochloromethane	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Bromodichloromethane	1.65 U	1.65	0.512	ug/Kg	1		09/24/19 18:53
Bromoform	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Bromomethane	16.5 U	16.5	5.12	ug/Kg	1		09/24/19 18:53
Carbon disulfide	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
Carbon tetrachloride	10.3 U	10.3	3.22	ug/Kg	1		09/24/19 18:53
Chlorobenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53

Print Date: 10/25/2019 4:15:17PM



Results of St-1-16

Client Sample ID: **St-1-16**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630015
 Lab Project ID: 1195630

Collection Date: 09/18/19 09:19
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):94.4
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	165 U	165	51.2	ug/Kg	1		09/24/19 18:53
Chloroform	1.65 U	1.65	0.512	ug/Kg	1		09/24/19 18:53
Chloromethane	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
cis-1,2-Dichloroethene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
cis-1,3-Dichloropropene	10.3 U	10.3	3.22	ug/Kg	1		09/24/19 18:53
Dibromochloromethane	1.65 U	1.65	0.512	ug/Kg	1		09/24/19 18:53
Dibromomethane	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Dichlorodifluoromethane	41.3 U	41.3	12.4	ug/Kg	1		09/24/19 18:53
Ethylbenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Freon-113	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
Hexachlorobutadiene	16.5 U	16.5	5.12	ug/Kg	1		09/24/19 18:53
Isopropylbenzene (Cumene)	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Methylene chloride	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
Methyl-t-butyl ether	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
Naphthalene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
n-Butylbenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
n-Propylbenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
o-Xylene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
P & M -Xylene	41.3 U	41.3	12.4	ug/Kg	1		09/24/19 18:53
sec-Butylbenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Styrene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
tert-Butylbenzene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
Tetrachloroethene	33.6	10.3	3.22	ug/Kg	1		09/24/19 18:53
Toluene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
trans-1,2-Dichloroethene	20.6 U	20.6	6.44	ug/Kg	1		09/24/19 18:53
trans-1,3-Dichloropropene	10.3 U	10.3	3.22	ug/Kg	1		09/24/19 18:53
Trichloroethene	4.13 U	4.13	1.24	ug/Kg	1		09/24/19 18:53
Trichlorofluoromethane	41.3 U	41.3	12.4	ug/Kg	1		09/24/19 18:53
Vinyl acetate	82.5 U	82.5	25.6	ug/Kg	1		09/24/19 18:53
Vinyl chloride	0.660 U	0.660	0.206	ug/Kg	1		09/24/19 18:53
Xylenes (total)	61.9 U	61.9	18.8	ug/Kg	1		09/24/19 18:53
Surrogates							
1,2-Dichloroethane-D4 (surr)	113	71-136		%	1		09/24/19 18:53
4-Bromofluorobenzene (surr)	130	55-151		%	1		09/24/19 18:53
Toluene-d8 (surr)	99.3	85-116		%	1		09/24/19 18:53

Print Date: 10/25/2019 4:15:17PM

Results of **St-1-16**

Client Sample ID: **St-1-16**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630015
Lab Project ID: 1195630

Collection Date: 09/18/19 09:19
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):94.4
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 18:53
Container ID: 1195630015-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:19
Prep Initial Wt./Vol.: 75.051 g
Prep Extract Vol: 29.2257 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-22

Client Sample ID: **St-1-22**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630016
Lab Project ID: 1195630

Collection Date: 09/18/19 09:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.2
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	11.1	0.204	0.0634	mg/Kg	10		09/26/19 19:09

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:09
Container ID: 1195630016-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.028 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-22**

Client Sample ID: **St-1-22**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630016
Lab Project ID: 1195630

Collection Date: 09/18/19 09:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.2
Location:

Results by **Semivolatile Organic Fuels**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	74.0	20.8	6.46	mg/Kg	1		10/02/19 20:56
Surrogates							
5a Androstane (surr)	90	50-150		%	1		10/02/19 20:56

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 20:56
Container ID: 1195630016-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.254 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-22**

Client Sample ID: **St-1-22**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630016
Lab Project ID: 1195630

Collection Date: 09/18/19 09:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.2
Location:

Results by **Volatile Fuels**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	2.16	1.50	0.450	mg/Kg	1		10/04/19 01:34
Surrogates							
4-Bromofluorobenzene (surr)	150	50-150		%	1		10/04/19 01:34

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 01:34
Container ID: 1195630016-B

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:30
Prep Initial Wt./Vol.: 105.263 g
Prep Extract Vol: 30.0639 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-22**

Client Sample ID: **St-1-22**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630016
Lab Project ID: 1195630

Collection Date: 09/18/19 09:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.2
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	12.0 U	12.0	3.72	ug/Kg	1		09/24/19 19:09
1,1,1-Trichloroethane	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,1,2,2-Tetrachloroethane	1.20 U	1.20	0.372	ug/Kg	1		09/24/19 19:09
1,1,2-Trichloroethane	0.480 U	0.480	0.150	ug/Kg	1		09/24/19 19:09
1,1-Dichloroethane	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,1-Dichloroethene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,1-Dichloropropene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,2,3-Trichlorobenzene	30.0 U	30.0	9.00	ug/Kg	1		09/24/19 19:09
1,2,3-Trichloropropane	0.600 U	0.600	0.186	ug/Kg	1		09/24/19 19:09
1,2,4-Trichlorobenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,2,4-Trimethylbenzene	136	30.0	9.00	ug/Kg	1		09/24/19 19:09
1,2-Dibromo-3-chloropropane	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
1,2-Dibromoethane	0.600 U	0.600	0.186	ug/Kg	1		09/24/19 19:09
1,2-Dichlorobenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,2-Dichloroethane	1.20 U	1.20	0.372	ug/Kg	1		09/24/19 19:09
1,2-Dichloropropane	6.00 U	6.00	1.86	ug/Kg	1		09/24/19 19:09
1,3,5-Trimethylbenzene	131	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,3-Dichlorobenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
1,3-Dichloropropane	6.00 U	6.00	1.86	ug/Kg	1		09/24/19 19:09
1,4-Dichlorobenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
2,2-Dichloropropane	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
2-Butanone (MEK)	150 U	150	46.8	ug/Kg	1		09/24/19 19:09
2-Chlorotoluene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
2-Hexanone	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
4-Chlorotoluene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
4-Isopropyltoluene	60.0 U	60.0	15.0	ug/Kg	1		09/24/19 19:09
4-Methyl-2-pentanone (MIBK)	150 U	150	46.8	ug/Kg	1		09/24/19 19:09
Acetone	150 U	150	46.8	ug/Kg	1		09/24/19 19:09
Benzene	7.50 U	7.50	2.34	ug/Kg	1		09/24/19 19:09
Bromobenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Bromochloromethane	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Bromodichloromethane	1.20 U	1.20	0.372	ug/Kg	1		09/24/19 19:09
Bromoform	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Bromomethane	12.0 U	12.0	3.72	ug/Kg	1		09/24/19 19:09
Carbon disulfide	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
Carbon tetrachloride	7.50 U	7.50	2.34	ug/Kg	1		09/24/19 19:09
Chlorobenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-22**

Client Sample ID: **St-1-22**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630016
Lab Project ID: 1195630

Collection Date: 09/18/19 09:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.2
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	120 U	120	37.2	ug/Kg	1		09/24/19 19:09
Chloroform	1.20 U	1.20	0.372	ug/Kg	1		09/24/19 19:09
Chloromethane	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
cis-1,2-Dichloroethene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
cis-1,3-Dichloropropene	7.50 U	7.50	2.34	ug/Kg	1		09/24/19 19:09
Dibromochloromethane	1.20 U	1.20	0.372	ug/Kg	1		09/24/19 19:09
Dibromomethane	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Dichlorodifluoromethane	30.0 U	30.0	9.00	ug/Kg	1		09/24/19 19:09
Ethylbenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Freon-113	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
Hexachlorobutadiene	12.0 U	12.0	3.72	ug/Kg	1		09/24/19 19:09
Isopropylbenzene (Cumene)	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Methylene chloride	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
Methyl-t-butyl ether	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
Naphthalene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
n-Butylbenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
n-Propylbenzene	22.2	15.0	4.68	ug/Kg	1		09/24/19 19:09
o-Xylene	75.6	15.0	4.68	ug/Kg	1		09/24/19 19:09
P & M -Xylene	54.5	30.0	9.00	ug/Kg	1		09/24/19 19:09
sec-Butylbenzene	20.9	15.0	4.68	ug/Kg	1		09/24/19 19:09
Styrene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
tert-Butylbenzene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
Tetrachloroethene	95.9	7.50	2.34	ug/Kg	1		09/24/19 19:09
Toluene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
trans-1,2-Dichloroethene	15.0 U	15.0	4.68	ug/Kg	1		09/24/19 19:09
trans-1,3-Dichloropropene	7.50 U	7.50	2.34	ug/Kg	1		09/24/19 19:09
Trichloroethene	3.00 U	3.00	0.900	ug/Kg	1		09/24/19 19:09
Trichlorofluoromethane	30.0 U	30.0	9.00	ug/Kg	1		09/24/19 19:09
Vinyl acetate	60.0 U	60.0	18.6	ug/Kg	1		09/24/19 19:09
Vinyl chloride	0.480 U	0.480	0.150	ug/Kg	1		09/24/19 19:09
Xylenes (total)	130	45.0	13.7	ug/Kg	1		09/24/19 19:09
Surrogates							
1,2-Dichloroethane-D4 (surr)	112	71-136		%	1		09/24/19 19:09
4-Bromofluorobenzene (surr)	139	55-151		%	1		09/24/19 19:09
Toluene-d8 (surr)	98.8	85-116		%	1		09/24/19 19:09

Print Date: 10/25/2019 4:15:17PM

Results of **St-1-22**

Client Sample ID: **St-1-22**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630016
Lab Project ID: 1195630

Collection Date: 09/18/19 09:30
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):95.2
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 19:09
Container ID: 1195630016-B

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/18/19 09:30
Prep Initial Wt./Vol.: 105.263 g
Prep Extract Vol: 30.0639 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-5

Client Sample ID: **St-1-5**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630017
Lab Project ID: 1195630

Collection Date: 09/18/19 08:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.5
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	10.8	0.203	0.0630	mg/Kg	10		09/26/19 19:23

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:23
Container ID: 1195630017-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.053 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of St-1-5

Client Sample ID: **St-1-5**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630017
Lab Project ID: 1195630

Collection Date: 09/18/19 08:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.5
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	21.4 U	21.4	6.62	mg/Kg	1		10/02/19 21:07
Surrogates							
5a Androstane (surr)	89.2	50-150		%	1		10/02/19 21:07

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 21:07
Container ID: 1195630017-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.056 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-5**

Client Sample ID: **St-1-5**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630017
Lab Project ID: 1195630

Collection Date: 09/18/19 08:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.5
Location:

Results by **Volatile Fuels**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	2.22 U	2.22	0.666	mg/Kg	1		10/04/19 01:52
Surrogates							
4-Bromofluorobenzene (surr)	91.8	50-150		%	1		10/04/19 01:52

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 01:52
Container ID: 1195630017-B

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 09/18/19 08:52
Prep Initial Wt./Vol.: 71.511 g
Prep Extract Vol: 29.6654 mL

Print Date: 10/25/2019 4:15:17PM



Results of **St-1-5**

Client Sample ID: **St-1-5**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630017
Lab Project ID: 1195630

Collection Date: 09/18/19 08:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.5
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	17.8 U	17.8	5.50	ug/Kg	1		09/25/19 22:50
1,1,1-Trichloroethane	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,1,2,2-Tetrachloroethane	1.78 U	1.78	0.550	ug/Kg	1		09/25/19 22:50
1,1,2-Trichloroethane	0.710 U	0.710	0.222	ug/Kg	1		09/25/19 22:50
1,1-Dichloroethane	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,1-Dichloroethene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,1-Dichloropropene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,2,3-Trichlorobenzene	44.4 U	44.4	13.3	ug/Kg	1		09/25/19 22:50
1,2,3-Trichloropropane	0.888 U	0.888	0.275	ug/Kg	1		09/25/19 22:50
1,2,4-Trichlorobenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,2,4-Trimethylbenzene	44.4 U	44.4	13.3	ug/Kg	1		09/25/19 22:50
1,2-Dibromo-3-chloropropane	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
1,2-Dibromoethane	0.888 U	0.888	0.275	ug/Kg	1		09/25/19 22:50
1,2-Dichlorobenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,2-Dichloroethane	1.78 U	1.78	0.550	ug/Kg	1		09/25/19 22:50
1,2-Dichloropropane	8.88 U	8.88	2.75	ug/Kg	1		09/25/19 22:50
1,3,5-Trimethylbenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,3-Dichlorobenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
1,3-Dichloropropane	8.88 U	8.88	2.75	ug/Kg	1		09/25/19 22:50
1,4-Dichlorobenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
2,2-Dichloropropane	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
2-Butanone (MEK)	222 U	222	69.2	ug/Kg	1		09/25/19 22:50
2-Chlorotoluene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
2-Hexanone	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
4-Chlorotoluene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
4-Isopropyltoluene	88.8 U	88.8	22.2	ug/Kg	1		09/25/19 22:50
4-Methyl-2-pentanone (MIBK)	222 U	222	69.2	ug/Kg	1		09/25/19 22:50
Acetone	222 U	222	69.2	ug/Kg	1		09/25/19 22:50
Benzene	11.1 U	11.1	3.46	ug/Kg	1		09/25/19 22:50
Bromobenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Bromochloromethane	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Bromodichloromethane	1.78 U	1.78	0.550	ug/Kg	1		09/25/19 22:50
Bromoform	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Bromomethane	17.8 U	17.8	5.50	ug/Kg	1		09/25/19 22:50
Carbon disulfide	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
Carbon tetrachloride	11.1 U	11.1	3.46	ug/Kg	1		09/25/19 22:50
Chlorobenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50

Print Date: 10/25/2019 4:15:17PM



Results of St-1-5

Client Sample ID: **St-1-5**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630017
 Lab Project ID: 1195630

Collection Date: 09/18/19 08:52
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):93.5
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	178 U	178	55.0	ug/Kg	1		09/25/19 22:50
Chloroform	1.78 U	1.78	0.550	ug/Kg	1		09/27/19 17:45
Chloromethane	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
cis-1,2-Dichloroethene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
cis-1,3-Dichloropropene	11.1 U	11.1	3.46	ug/Kg	1		09/25/19 22:50
Dibromochloromethane	1.78 U	1.78	0.550	ug/Kg	1		09/25/19 22:50
Dibromomethane	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Dichlorodifluoromethane	44.4 U	44.4	13.3	ug/Kg	1		09/25/19 22:50
Ethylbenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Freon-113	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
Hexachlorobutadiene	17.8 U	17.8	5.50	ug/Kg	1		09/25/19 22:50
Isopropylbenzene (Cumene)	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Methylene chloride	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
Methyl-t-butyl ether	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
Naphthalene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
n-Butylbenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
n-Propylbenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
o-Xylene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
P & M -Xylene	44.4 U	44.4	13.3	ug/Kg	1		09/25/19 22:50
sec-Butylbenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Styrene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
tert-Butylbenzene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
Tetrachloroethene	107	11.1	3.46	ug/Kg	1		09/25/19 22:50
Toluene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
trans-1,2-Dichloroethene	22.2 U	22.2	6.92	ug/Kg	1		09/25/19 22:50
trans-1,3-Dichloropropene	11.1 U	11.1	3.46	ug/Kg	1		09/25/19 22:50
Trichloroethene	4.44 U	4.44	1.33	ug/Kg	1		09/25/19 22:50
Trichlorofluoromethane	44.4 U	44.4	13.3	ug/Kg	1		09/25/19 22:50
Vinyl acetate	88.8 U	88.8	27.5	ug/Kg	1		09/25/19 22:50
Vinyl chloride	0.710 U	0.710	0.222	ug/Kg	1		09/25/19 22:50
Xylenes (total)	66.6 U	66.6	20.2	ug/Kg	1		09/25/19 22:50
Surrogates							
1,2-Dichloroethane-D4 (surr)	111	71-136		%	1		09/25/19 22:50
4-Bromofluorobenzene (surr)	112	55-151		%	1		09/25/19 22:50
Toluene-d8 (surr)	96.7	85-116		%	1		09/25/19 22:50

Print Date: 10/25/2019 4:15:17PM



Results of St-1-5

Client Sample ID: **St-1-5**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630017
Lab Project ID: 1195630

Collection Date: 09/18/19 08:52
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.5
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19499
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/27/19 17:45
Container ID: 1195630017-B

Prep Batch: VXX34974
Prep Method: SW5035A
Prep Date/Time: 09/18/19 08:52
Prep Initial Wt./Vol.: 71.511 g
Prep Extract Vol: 29.6654 mL

Analytical Batch: VMS19497
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/25/19 22:50
Container ID: 1195630017-B

Prep Batch: VXX34970
Prep Method: SW5035A
Prep Date/Time: 09/18/19 08:52
Prep Initial Wt./Vol.: 71.511 g
Prep Extract Vol: 29.6654 mL

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-1

Client Sample ID: **Con-St-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630018
Lab Project ID: 1195630

Collection Date: 09/18/19 10:37
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.1
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	4.37	0.197	0.0612	mg/Kg	10		09/26/19 19:28

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:28
Container ID: 1195630018-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.054 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-1

Client Sample ID: **Con-St-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630018
Lab Project ID: 1195630

Collection Date: 09/18/19 10:37
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.1
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	1010	20.7	6.42	mg/Kg	1		10/02/19 21:16
Surrogates							
5a Androstane (surr)	96.2	50-150		%	1		10/02/19 21:16

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 21:16
Container ID: 1195630018-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.158 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM

Results of Con-St-1

Client Sample ID: **Con-St-1**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630018
 Lab Project ID: 1195630

Collection Date: 09/18/19 10:37
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):96.1
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	13.2		1.52	0.457	mg/Kg	1		10/04/19 02:10
Surrogates								
4-Bromofluorobenzene (surr)	156	*	50-150		%	1		10/04/19 02:10

Batch Information

Analytical Batch: VFC14972
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 10/04/19 02:10
 Container ID: 1195630018-B

Prep Batch: VXX35006
 Prep Method: SW5035A
 Prep Date/Time: 09/18/19 10:37
 Prep Initial Wt./Vol.: 98.641 g
 Prep Extract Vol: 28.853 mL

Print Date: 10/25/2019 4:15:17PM



Results of **Con-St-1**

Client Sample ID: **Con-St-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630018
Lab Project ID: 1195630

Collection Date: 09/18/19 10:37
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.1
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	12.2 U	12.2	3.77	ug/Kg	1		09/25/19 23:05
1,1,1-Trichloroethane	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,1,2,2-Tetrachloroethane	1.22 U	1.22	0.377	ug/Kg	1		09/25/19 23:05
1,1,2-Trichloroethane	0.487 U	0.487	0.152	ug/Kg	1		09/25/19 23:05
1,1-Dichloroethane	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,1-Dichloroethene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,1-Dichloropropene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,2,3-Trichlorobenzene	30.4 U	30.4	9.13	ug/Kg	1		09/25/19 23:05
1,2,3-Trichloropropane	0.609 U	0.609	0.189	ug/Kg	1		09/25/19 23:05
1,2,4-Trichlorobenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,2,4-Trimethylbenzene	442	30.4	9.13	ug/Kg	1		09/25/19 23:05
1,2-Dibromo-3-chloropropane	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
1,2-Dibromoethane	0.609 U	0.609	0.189	ug/Kg	1		09/25/19 23:05
1,2-Dichlorobenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,2-Dichloroethane	1.22 U	1.22	0.377	ug/Kg	1		09/25/19 23:05
1,2-Dichloropropane	6.09 U	6.09	1.89	ug/Kg	1		09/25/19 23:05
1,3,5-Trimethylbenzene	763	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,3-Dichlorobenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
1,3-Dichloropropane	6.09 U	6.09	1.89	ug/Kg	1		09/25/19 23:05
1,4-Dichlorobenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
2,2-Dichloropropane	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
2-Butanone (MEK)	152 U	152	47.5	ug/Kg	1		09/25/19 23:05
2-Chlorotoluene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
2-Hexanone	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
4-Chlorotoluene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
4-Isopropyltoluene	171	60.9	15.2	ug/Kg	1		09/25/19 23:05
4-Methyl-2-pentanone (MIBK)	152 U	152	47.5	ug/Kg	1		09/25/19 23:05
Acetone	152 U	152	47.5	ug/Kg	1		09/25/19 23:05
Benzene	7.61 U	7.61	2.37	ug/Kg	1		09/25/19 23:05
Bromobenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Bromochloromethane	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Bromodichloromethane	1.22 U	1.22	0.377	ug/Kg	1		09/25/19 23:05
Bromoform	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Bromomethane	12.2 U	12.2	3.77	ug/Kg	1		09/25/19 23:05
Carbon disulfide	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
Carbon tetrachloride	7.61 U	7.61	2.37	ug/Kg	1		09/25/19 23:05
Chlorobenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05

Print Date: 10/25/2019 4:15:17PM



Results of **Con-St-1**

Client Sample ID: **Con-St-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630018
Lab Project ID: 1195630

Collection Date: 09/18/19 10:37
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.1
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	122 U	122	37.7	ug/Kg	1		09/25/19 23:05
Chloroform	1.22 U	1.22	0.377	ug/Kg	1		09/27/19 18:01
Chloromethane	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
cis-1,2-Dichloroethene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
cis-1,3-Dichloropropene	7.61 U	7.61	2.37	ug/Kg	1		09/25/19 23:05
Dibromochloromethane	1.22 U	1.22	0.377	ug/Kg	1		09/25/19 23:05
Dibromomethane	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Dichlorodifluoromethane	30.4 U	30.4	9.13	ug/Kg	1		09/25/19 23:05
Ethylbenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Freon-113	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
Hexachlorobutadiene	12.2 U	12.2	3.77	ug/Kg	1		09/25/19 23:05
Isopropylbenzene (Cumene)	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Methylene chloride	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
Methyl-t-butyl ether	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
Naphthalene	88.0	15.2	4.75	ug/Kg	1		09/25/19 23:05
n-Butylbenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
n-Propylbenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
o-Xylene	149	15.2	4.75	ug/Kg	1		09/25/19 23:05
P & M -Xylene	30.4 U	30.4	9.13	ug/Kg	1		09/25/19 23:05
sec-Butylbenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Styrene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
tert-Butylbenzene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
Tetrachloroethene	18.3	7.61	2.37	ug/Kg	1		09/25/19 23:05
Toluene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
trans-1,2-Dichloroethene	15.2 U	15.2	4.75	ug/Kg	1		09/25/19 23:05
trans-1,3-Dichloropropene	7.61 U	7.61	2.37	ug/Kg	1		09/25/19 23:05
Trichloroethene	3.04 U	3.04	0.913	ug/Kg	1		09/25/19 23:05
Trichlorofluoromethane	30.4 U	30.4	9.13	ug/Kg	1		09/25/19 23:05
Vinyl acetate	60.9 U	60.9	18.9	ug/Kg	1		09/25/19 23:05
Vinyl chloride	0.487 U	0.487	0.152	ug/Kg	1		09/25/19 23:05
Xylenes (total)	163	45.7	13.9	ug/Kg	1		09/25/19 23:05
Surrogates							
1,2-Dichloroethane-D4 (surr)	117	71-136		%	1		09/25/19 23:05
4-Bromofluorobenzene (surr)	137	55-151		%	1		09/25/19 23:05
Toluene-d8 (surr)	96.4	85-116		%	1		09/25/19 23:05

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-1

Client Sample ID: **Con-St-1**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630018
Lab Project ID: 1195630

Collection Date: 09/18/19 10:37
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):96.1
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19499
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/27/19 18:01
Container ID: 1195630018-B

Prep Batch: VXX34974
Prep Method: SW5035A
Prep Date/Time: 09/18/19 10:37
Prep Initial Wt./Vol.: 98.641 g
Prep Extract Vol: 28.853 mL

Analytical Batch: VMS19497
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/25/19 23:05
Container ID: 1195630018-B

Prep Batch: VXX34970
Prep Method: SW5035A
Prep Date/Time: 09/18/19 10:37
Prep Initial Wt./Vol.: 98.641 g
Prep Extract Vol: 28.853 mL

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-7

Client Sample ID: **Con-St-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630019
Lab Project ID: 1195630

Collection Date: 09/18/19 10:43
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.7
Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Lead	12.5	0.211	0.0655	mg/Kg	10		09/26/19 19:33

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Analyst: BMZ
Analytical Date/Time: 09/26/19 19:33
Container ID: 1195630019-A

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 09/25/19 15:45
Prep Initial Wt./Vol.: 1.01 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-7

Client Sample ID: **Con-St-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630019
Lab Project ID: 1195630

Collection Date: 09/18/19 10:43
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.7
Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	182	21.2	6.56	mg/Kg	1		10/02/19 21:26
Surrogates							
5a Androstane (surr)	88.7	50-150		%	1		10/02/19 21:26

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Analyst: CMS
Analytical Date/Time: 10/02/19 21:26
Container ID: 1195630019-A

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 09/26/19 17:33
Prep Initial Wt./Vol.: 30.261 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-7

Client Sample ID: **Con-St-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630019
Lab Project ID: 1195630

Collection Date: 09/18/19 10:43
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.7
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	5.13		2.45	0.736	mg/Kg	1		10/04/19 21:42
Surrogates								
4-Bromofluorobenzene (surr)	174	*	50-150		%	1		10/04/19 21:42

Batch Information

Analytical Batch: VFC14973
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/04/19 21:42
Container ID: 1195630019-B

Prep Batch: VXX35018
Prep Method: SW5035A
Prep Date/Time: 09/18/19 10:43
Prep Initial Wt./Vol.: 63.141 g
Prep Extract Vol: 29.0065 mL

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-7

Client Sample ID: **Con-St-7**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630019
 Lab Project ID: 1195630

Collection Date: 09/18/19 10:43
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):93.7
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	19.6 U	19.6	6.08	ug/Kg	1		09/25/19 23:21
1,1,1-Trichloroethane	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,1,2,2-Tetrachloroethane	1.96 U	1.96	0.608	ug/Kg	1		09/25/19 23:21
1,1,2-Trichloroethane	0.785 U	0.785	0.245	ug/Kg	1		09/25/19 23:21
1,1-Dichloroethane	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,1-Dichloroethene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,1-Dichloropropene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,2,3-Trichlorobenzene	49.1 U	49.1	14.7	ug/Kg	1		09/25/19 23:21
1,2,3-Trichloropropane	0.981 U	0.981	0.304	ug/Kg	1		09/25/19 23:21
1,2,4-Trichlorobenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,2,4-Trimethylbenzene	396	49.1	14.7	ug/Kg	1		09/25/19 23:21
1,2-Dibromo-3-chloropropane	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
1,2-Dibromoethane	0.981 U	0.981	0.304	ug/Kg	1		09/25/19 23:21
1,2-Dichlorobenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,2-Dichloroethane	1.96 U	1.96	0.608	ug/Kg	1		09/25/19 23:21
1,2-Dichloropropane	9.81 U	9.81	3.04	ug/Kg	1		09/25/19 23:21
1,3,5-Trimethylbenzene	325	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,3-Dichlorobenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
1,3-Dichloropropane	9.81 U	9.81	3.04	ug/Kg	1		09/25/19 23:21
1,4-Dichlorobenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
2,2-Dichloropropane	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
2-Butanone (MEK)	245 U	245	76.5	ug/Kg	1		09/25/19 23:21
2-Chlorotoluene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
2-Hexanone	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
4-Chlorotoluene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
4-Isopropyltoluene	258	98.1	24.5	ug/Kg	1		09/25/19 23:21
4-Methyl-2-pentanone (MIBK)	245 U	245	76.5	ug/Kg	1		09/25/19 23:21
Acetone	245 U	245	76.5	ug/Kg	1		09/25/19 23:21
Benzene	12.3 U	12.3	3.83	ug/Kg	1		09/25/19 23:21
Bromobenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Bromochloromethane	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Bromodichloromethane	1.96 U	1.96	0.608	ug/Kg	1		09/25/19 23:21
Bromoform	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Bromomethane	19.6 U	19.6	6.08	ug/Kg	1		09/25/19 23:21
Carbon disulfide	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
Carbon tetrachloride	12.3 U	12.3	3.83	ug/Kg	1		09/25/19 23:21
Chlorobenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21

Print Date: 10/25/2019 4:15:17PM



Results of **Con-St-7**

Client Sample ID: **Con-St-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630019
Lab Project ID: 1195630

Collection Date: 09/18/19 10:43
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.7
Location:

Results by **Volatile GC/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	196 U	196	60.8	ug/Kg	1		09/25/19 23:21
Chloroform	1.96 U	1.96	0.608	ug/Kg	1		09/27/19 18:17
Chloromethane	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
cis-1,2-Dichloroethene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
cis-1,3-Dichloropropene	12.3 U	12.3	3.83	ug/Kg	1		09/25/19 23:21
Dibromochloromethane	1.96 U	1.96	0.608	ug/Kg	1		09/25/19 23:21
Dibromomethane	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Dichlorodifluoromethane	49.1 U	49.1	14.7	ug/Kg	1		09/25/19 23:21
Ethylbenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Freon-113	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
Hexachlorobutadiene	19.6 U	19.6	6.08	ug/Kg	1		09/25/19 23:21
Isopropylbenzene (Cumene)	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Methylene chloride	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
Methyl-t-butyl ether	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
Naphthalene	50.3	24.5	7.65	ug/Kg	1		09/25/19 23:21
n-Butylbenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
n-Propylbenzene	40.5	24.5	7.65	ug/Kg	1		09/25/19 23:21
o-Xylene	65.0	24.5	7.65	ug/Kg	1		09/25/19 23:21
P & M -Xylene	49.1 U	49.1	14.7	ug/Kg	1		09/25/19 23:21
sec-Butylbenzene	69.2	24.5	7.65	ug/Kg	1		09/25/19 23:21
Styrene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
tert-Butylbenzene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
Tetrachloroethene	35.6	12.3	3.83	ug/Kg	1		09/25/19 23:21
Toluene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
trans-1,2-Dichloroethene	24.5 U	24.5	7.65	ug/Kg	1		09/25/19 23:21
trans-1,3-Dichloropropene	12.3 U	12.3	3.83	ug/Kg	1		09/25/19 23:21
Trichloroethene	4.91 U	4.91	1.47	ug/Kg	1		09/25/19 23:21
Trichlorofluoromethane	49.1 U	49.1	14.7	ug/Kg	1		09/25/19 23:21
Vinyl acetate	98.1 U	98.1	30.4	ug/Kg	1		09/25/19 23:21
Vinyl chloride	0.785 U	0.785	0.245	ug/Kg	1		09/25/19 23:21
Xylenes (total)	107	73.6	22.4	ug/Kg	1		09/25/19 23:21
Surrogates							
1,2-Dichloroethane-D4 (surr)	112	71-136		%	1		09/25/19 23:21
4-Bromofluorobenzene (surr)	131	55-151		%	1		09/25/19 23:21
Toluene-d8 (surr)	96.9	85-116		%	1		09/25/19 23:21

Print Date: 10/25/2019 4:15:17PM



Results of Con-St-7

Client Sample ID: **Con-St-7**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630019
Lab Project ID: 1195630

Collection Date: 09/18/19 10:43
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):93.7
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19499
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/27/19 18:17
Container ID: 1195630019-B

Prep Batch: VXX34974
Prep Method: SW5035A
Prep Date/Time: 09/18/19 10:43
Prep Initial Wt./Vol.: 63.141 g
Prep Extract Vol: 29.0065 mL

Analytical Batch: VMS19497
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/25/19 23:21
Container ID: 1195630019-B

Prep Batch: VXX34970
Prep Method: SW5035A
Prep Date/Time: 09/18/19 10:43
Prep Initial Wt./Vol.: 63.141 g
Prep Extract Vol: 29.0065 mL

Print Date: 10/25/2019 4:15:17PM



Results of Trip Blank

Client Sample ID: **Trip Blank**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630020
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	2.51 U	2.51	0.752	mg/Kg	1		10/03/19 02:02
Surrogates							
4-Bromofluorobenzene (surr)	90.9	50-150		%	1		10/03/19 02:02

Batch Information

Analytical Batch: VFC14970
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 10/03/19 02:02
Container ID: 1195630020-A

Prep Batch: VXX35000
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:05
Prep Initial Wt./Vol.: 49.864 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:17PM



Results of Trip Blank

Client Sample ID: Trip Blank
Client Project ID: 18021 UST 0204 Closure
Lab Sample ID: 1195630020
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Print Date: 10/25/2019 4:15:17PM



Results of Trip Blank

Client Sample ID: **Trip Blank**
 Client Project ID: **18021 UST 0204 Closure**
 Lab Sample ID: 1195630020
 Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
 Received Date: 09/23/19 10:49
 Matrix: Soil/Solid (dry weight)
 Solids (%):
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroethane	201 U	201	62.2	ug/Kg	1		09/24/19 14:18
Chloroform	2.01 U	2.01	0.622	ug/Kg	1		09/24/19 14:18
Chloromethane	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
cis-1,2-Dichloroethene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
cis-1,3-Dichloropropene	12.5 U	12.5	3.91	ug/Kg	1		09/24/19 14:18
Dibromochloromethane	2.01 U	2.01	0.622	ug/Kg	1		09/24/19 14:18
Dibromomethane	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
Dichlorodifluoromethane	50.1 U	50.1	15.0	ug/Kg	1		09/24/19 14:18
Ethylbenzene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
Freon-113	100 U	100	31.1	ug/Kg	1		09/24/19 14:18
Hexachlorobutadiene	20.1 U	20.1	6.22	ug/Kg	1		09/24/19 14:18
Isopropylbenzene (Cumene)	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
Methylene chloride	100 U	100	31.1	ug/Kg	1		09/24/19 14:18
Methyl-t-butyl ether	100 U	100	31.1	ug/Kg	1		09/24/19 14:18
Naphthalene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
n-Butylbenzene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
n-Propylbenzene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
o-Xylene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
P & M -Xylene	50.1 U	50.1	15.0	ug/Kg	1		09/24/19 14:18
sec-Butylbenzene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
Styrene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
tert-Butylbenzene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
Tetrachloroethene	12.5 U	12.5	3.91	ug/Kg	1		09/24/19 14:18
Toluene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
trans-1,2-Dichloroethene	25.1 U	25.1	7.82	ug/Kg	1		09/24/19 14:18
trans-1,3-Dichloropropene	12.5 U	12.5	3.91	ug/Kg	1		09/24/19 14:18
Trichloroethene	5.01 U	5.01	1.50	ug/Kg	1		09/24/19 14:18
Trichlorofluoromethane	50.1 U	50.1	15.0	ug/Kg	1		09/24/19 14:18
Vinyl acetate	100 U	100	31.1	ug/Kg	1		09/24/19 14:18
Vinyl chloride	0.802 U	0.802	0.251	ug/Kg	1		09/24/19 14:18
Xylenes (total)	75.2 U	75.2	22.9	ug/Kg	1		09/24/19 14:18
Surrogates							
1,2-Dichloroethane-D4 (surr)	107	71-136		%	1		09/24/19 14:18
4-Bromofluorobenzene (surr)	110	55-151		%	1		09/24/19 14:18
Toluene-d8 (surr)	101	85-116		%	1		09/24/19 14:18

Print Date: 10/25/2019 4:15:17PM



Results of Trip Blank

Client Sample ID: **Trip Blank**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630020
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Analyst: KAJ
Analytical Date/Time: 09/24/19 14:18
Container ID: 1195630020-A

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:05
Prep Initial Wt./Vol.: 49.864 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:17PM



Results of Trip Blank

Client Sample ID: **Trip Blank**
Client Project ID: **18021 UST 0204 Closure**
Lab Sample ID: 1195630020
Lab Project ID: 1195630

Collection Date: 09/17/19 08:05
Received Date: 09/23/19 10:49
Matrix: Soil/Solid (dry weight)
Solids (%):
Location:

Results by Volatile-SIM

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,2-Dibromoethane	0.125 U	0.125	0.0311	ug/Kg	1		09/29/19 23:04
Surrogates							
4-Bromofluorobenzene (surr)	90.2	55-151		%	1		09/29/19 23:04
Toluene-d8 (surr)	95.3	85-116		%	1		09/29/19 23:04

Batch Information

Analytical Batch: VMS19503
Analytical Method: SW8260C-SIM
Analyst: NRB
Analytical Date/Time: 09/29/19 23:04
Container ID: 1195630020-A

Prep Batch: VXX34979
Prep Method: SW5035A
Prep Date/Time: 09/17/19 08:05
Prep Initial Wt./Vol.: 49.864 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:17PM



Method Blank

Blank ID: MB for HBN 1799970 [MXX/32843]
Blank Lab ID: 1534242

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630011, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018, 1195630019

Results by SW6020A

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Lead	0.100U	0.200	0.0620	mg/Kg

Batch Information

Analytical Batch: MMS10631
Analytical Method: SW6020A
Instrument: Perkin Elmer Nexlon P5
Analyst: BMZ
Analytical Date/Time: 9/26/2019 5:49:45PM

Prep Batch: MXX32843
Prep Method: SW3050B
Prep Date/Time: 9/25/2019 3:45:03PM
Prep Initial Wt./Vol.: 1 g
Prep Extract Vol: 50 mL

Print Date: 10/25/2019 4:15:21PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [MXX32843]
Blank Spike Lab ID: 1534243
Date Analyzed: 09/26/2019 17:54

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007,
1195630008, 1195630011, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018,
1195630019

Results by SW6020A

Parameter	Blank Spike (mg/Kg)			CL
	Spike	Result	Rec (%)	
Lead	50	51.9	104	(84-118)

Batch Information

Analytical Batch: **MMS10631**
Analytical Method: **SW6020A**
Instrument: **Perkin Elmer Nexlon P5**
Analyst: **BMZ**

Prep Batch: **MXX32843**
Prep Method: **SW3050B**
Prep Date/Time: **09/25/2019 15:45**
Spike Init Wt./Vol.: 50 mg/Kg Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/25/2019 4:15:22PM

Matrix Spike Summary

Original Sample ID: 1534244
 MS Sample ID: 1534245 MS
 MSD Sample ID: 1534246 MSD

Analysis Date: 09/26/2019 17:59
 Analysis Date: 09/26/2019 18:03
 Analysis Date: 09/26/2019 18:08
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007,
 1195630008, 1195630011, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018,
 1195630019

Results by SW6020A

Parameter	Sample	Matrix Spike (mg/Kg)			Spike Duplicate (mg/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Lead	6.91	48.1	60.9	112	46.6	59.0	112	84-118	3.10	(< 20)

Batch Information

Analytical Batch: MMS10631
 Analytical Method: SW6020A
 Instrument: Perkin Elmer Nexlon P5
 Analyst: BMZ
 Analytical Date/Time: 9/26/2019 6:03:48PM

Prep Batch: MXX32843
 Prep Method: Soils/Solids Digest for Metals by ICP-MS
 Prep Date/Time: 9/25/2019 3:45:03PM
 Prep Initial Wt./Vol.: 1.04g
 Prep Extract Vol: 50.00mL



Method Blank

Blank ID: MB for HBN 1799952 [SPT/10891]
Blank Lab ID: 1534148

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630011, 1195630013, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018, 1195630019

Results by SM21 2540G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Solids	100			%

Batch Information

Analytical Batch: SPT10891
Analytical Method: SM21 2540G
Instrument:
Analyst: M.M
Analytical Date/Time: 9/24/2019 11:29:00PM

Print Date: 10/25/2019 4:15:24PM

Duplicate Sample Summary

Original Sample ID: 1195629006

Duplicate Sample ID: 1534149

Analysis Date: 09/24/2019 23:29

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630011, 1195630013, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018, 1195630019

Results by SM21 2540G

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Solids	89.5	89.4	%	0.12	(< 15)

Batch Information

Analytical Batch: SPT10891

Analytical Method: SM21 2540G

Instrument:

Analyst: M.M

Print Date: 10/25/2019 4:15:25PM

Duplicate Sample Summary

Original Sample ID: 1195640002

Analysis Date: 09/24/2019 23:29

Duplicate Sample ID: 1534150

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630011, 1195630013, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018, 1195630019

Results by SM21 2540G

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Solids	91.0	91.4	%	0.39	(< 15)

Batch Information

Analytical Batch: SPT10891

Analytical Method: SM21 2540G

Instrument:

Analyst: M.M

Print Date: 10/25/2019 4:15:25PM

Method Blank

Blank ID: MB for HBN 1799972 [VXX/34961]
 Blank Lab ID: 1534256

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
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	0.500U	1.00	0.310	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	0.310	ug/Kg
1,2-Dichlorobenzene	12.5U	25.0	7.80	ug/Kg
1,2-Dichloroethane	1.00U	2.00	0.620	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

Print Date: 10/25/2019 4:15:26PM

Method Blank

Blank ID: MB for HBN 1799972 [VXX/34961]
 Blank Lab ID: 1534256

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Chloroform	1.00U	2.00	0.620	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	1.00U	2.00	0.620	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	50.0U	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)	107	71-136		%
4-Bromofluorobenzene (surr)	93.6	55-151		%
Toluene-d8 (surr)	101	85-116		%



Method Blank

Blank ID: MB for HBN 1799972 [VXX/34961]
Blank Lab ID: 1534256

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
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Batch Information

Analytical Batch: VMS19493
Analytical Method: SW8260C
Instrument: VQA 7890/5975 GC/MS
Analyst: KAJ
Analytical Date/Time: 9/24/2019 9:33:00AM

Prep Batch: VXX34961
Prep Method: SW5035A
Prep Date/Time: 9/24/2019 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:26PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34961]

Blank Spike Lab ID: 1534257

Date Analyzed: 09/24/2019 09:49

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

Parameter	Blank Spike (ug/Kg)			CL
	Spike	Result	Rec (%)	
1,1,1,2-Tetrachloroethane	750	733	98	(78-125)
1,1,1-Trichloroethane	750	744	99	(73-130)
1,1,2,2-Tetrachloroethane	750	725	97	(70-124)
1,1,2-Trichloroethane	750	755	101	(78-121)
1,1-Dichloroethane	750	674	90	(76-125)
1,1-Dichloroethene	750	701	93	(70-131)
1,1-Dichloropropene	750	820	109	(76-125)
1,2,3-Trichlorobenzene	750	685	91	(66-130)
1,2,3-Trichloropropane	750	737	98	(73-125)
1,2,4-Trichlorobenzene	750	741	99	(67-129)
1,2,4-Trimethylbenzene	750	741	99	(75-123)
1,2-Dibromo-3-chloropropane	750	693	92	(61-132)
1,2-Dibromoethane	750	765	102	(78-122)
1,2-Dichlorobenzene	750	726	97	(78-121)
1,2-Dichloroethane	750	714	95	(73-128)
1,2-Dichloropropane	750	746	99	(76-123)
1,3,5-Trimethylbenzene	750	719	96	(73-124)
1,3-Dichlorobenzene	750	750	100	(77-121)
1,3-Dichloropropane	750	766	102	(77-121)
1,4-Dichlorobenzene	750	741	99	(75-120)
2,2-Dichloropropane	750	759	101	(67-133)
2-Butanone (MEK)	2250	2160	96	(51-148)
2-Chlorotoluene	750	719	96	(75-122)
2-Hexanone	2250	2140	95	(53-145)
4-Chlorotoluene	750	711	95	(72-124)
4-Isopropyltoluene	750	762	102	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2010	89	(65-135)
Acetone	2250	2050	91	(36-164)
Benzene	750	737	98	(77-121)
Bromobenzene	750	769	103	(78-121)
Bromochloromethane	750	683	91	(78-125)
Bromodichloromethane	750	722	96	(75-127)
Bromoform	750	746	99	(67-132)
Bromomethane	750	664	89	(53-143)

Print Date: 10/25/2019 4:15:27PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34961]

Blank Spike Lab ID: 1534257

Date Analyzed: 09/24/2019 09:49

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

Parameter	Blank Spike (ug/Kg)			CL
	Spike	Result	Rec (%)	
Carbon disulfide	1130	1030	92	(63-132)
Carbon tetrachloride	750	773	103	(70-135)
Chlorobenzene	750	720	96	(79-120)
Chloroethane	750	675	90	(59-139)
Chloroform	750	708	94	(78-123)
Chloromethane	750	643	86	(50-136)
cis-1,2-Dichloroethene	750	679	91	(77-123)
cis-1,3-Dichloropropene	750	772	103	(74-126)
Dibromochloromethane	750	777	104	(74-126)
Dibromomethane	750	687	92	(78-125)
Dichlorodifluoromethane	750	610	81	(29-149)
Ethylbenzene	750	701	93	(76-122)
Freon-113	1130	1130	100	(66-136)
Hexachlorobutadiene	750	828	110	(61-135)
Isopropylbenzene (Cumene)	750	746	99	(68-134)
Methylene chloride	750	687	92	(70-128)
Methyl-t-butyl ether	1130	1130	100	(73-125)
Naphthalene	750	673	90	(62-129)
n-Butylbenzene	750	780	104	(70-128)
n-Propylbenzene	750	757	101	(73-125)
o-Xylene	750	710	95	(77-123)
P & M -Xylene	1500	1440	96	(77-124)
sec-Butylbenzene	750	760	101	(73-126)
Styrene	750	711	95	(76-124)
tert-Butylbenzene	750	740	99	(73-125)
Tetrachloroethene	750	825	110	(73-128)
Toluene	750	733	98	(77-121)
trans-1,2-Dichloroethene	750	701	93	(74-125)
trans-1,3-Dichloropropene	750	790	105	(71-130)
Trichloroethene	750	797	106	(77-123)
Trichlorofluoromethane	750	659	88	(62-140)
Vinyl acetate	750	784	105	(50-151)
Vinyl chloride	750	647	86	(56-135)
Xylenes (total)	2250	2150	96	(78-124)

Print Date: 10/25/2019 4:15:27PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34961]

Blank Spike Lab ID: 1534257

Date Analyzed: 09/24/2019 09:49

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

Parameter	Blank Spike (ug/Kg)			CL
	Spike	Result	Rec (%)	
Surrogates				
1,2-Dichloroethane-D4 (surr)	750	96	96	(71-136)
4-Bromofluorobenzene (surr)	750	98.6	99	(55-151)
Toluene-d8 (surr)	750	102	102	(85-116)

Batch Information

Analytical Batch: **VMS19493**

Analytical Method: **SW8260C**

Instrument: **VQA 7890/5975 GC/MS**

Analyst: **KAJ**

Prep Batch: **VXX34961**

Prep Method: **SW5035A**

Prep Date/Time: **09/24/2019 06:00**

Spike Init Wt./Vol.: 750 ug/Kg Extract Vol: 25 mL

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1195598004
 MS Sample ID: 1534526 MS
 MSD Sample ID: 1534527 MSD

Analysis Date: 09/24/2019 14:34
 Analysis Date: 09/24/2019 12:58
 Analysis Date: 09/24/2019 13:14
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630015, 1195630016, 1195630020

Results by SW8260C

Parameter	Sample	Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1-Dichloroethene	14.1U	743	688	93	743	769	104	70-131	11.10	(< 20)
Carbon tetrachloride	7.05U	743	763	103	743	847	114	70-135	10.50	(< 20)
cis-1,2-Dichloroethene	14.1U	743	678	91	743	753	101	77-123	10.60	(< 20)
Tetrachloroethene	7.05U	743	816	110	743	882	119	73-128	7.60	(< 20)
trans-1,2-Dichloroethene	14.1U	743	686	92	743	762	103	74-125	10.50	(< 20)
Trichloroethene	245	743	1006	103	743	1099	116	77-123	9.10	(< 20)
Vinyl chloride	0.450U	743	650	88	743	703	95	56-135	7.90	(< 20)
Surrogates										
1,2-Dichloroethane-D4 (surr)		743	703	95	743	710	96	71-136	0.98	
4-Bromofluorobenzene (surr)		1238	1238	100	1238	1419	115	55-151	13.70	
Toluene-d8 (surr)		743	756	102	743	750	101	85-116	0.69	

Batch Information

Analytical Batch: VMS19493
 Analytical Method: SW8260C
 Instrument: VQA 7890/5975 GC/MS
 Analyst: KAJ
 Analytical Date/Time: 9/24/2019 12:58:00PM

Prep Batch: VXX34961
 Prep Method: Vol. Extraction SW8260 Field Extracted L
 Prep Date/Time: 9/23/2019 6:00:00AM
 Prep Initial Wt./Vol.: 53.92g
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1800055 [VXX/34970]

Blank Lab ID: 1534616

QC for Samples:

1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Matrix: Soil/Solid (dry weight)

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
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	0.500U	1.00	0.310	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	0.310	ug/Kg
1,2-Dichlorobenzene	12.5U	25.0	7.80	ug/Kg
1,2-Dichloroethane	1.00U	2.00	0.620	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

Print Date: 10/25/2019 4:15:29PM

Method Blank

Blank ID: MB for HBN 1800055 [VXX/34970]

Blank Lab ID: 1534616

QC for Samples:

1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Matrix: Soil/Solid (dry weight)

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
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	1.00U	2.00	0.620	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	50.0U	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)	118	71-136		%
4-Bromofluorobenzene (surr)	108	55-151		%
Toluene-d8 (surr)	95.6	85-116		%

Print Date: 10/25/2019 4:15:29PM



Method Blank

Blank ID: MB for HBN 1800055 [VXX/34970]
Blank Lab ID: 1534616

Matrix: Soil/Solid (dry weight)

QC for Samples:
1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
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Batch Information

Analytical Batch: VMS19497
Analytical Method: SW8260C
Instrument: VRA Agilent GC/MS 7890B/5977A
Analyst: KAJ
Analytical Date/Time: 9/25/2019 3:01:00PM

Prep Batch: VXX34970
Prep Method: SW5035A
Prep Date/Time: 9/25/2019 6:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:29PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34970]

Blank Spike Lab ID: 1534617

Date Analyzed: 09/25/2019 15:17

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Blank Spike (ug/Kg)			CL
	Spike	Result	Rec (%)	
1,1,1,2-Tetrachloroethane	750	825	110	(78-125)
1,1,1-Trichloroethane	750	885	118	(73-130)
1,1,2,2-Tetrachloroethane	750	755	101	(70-124)
1,1,2-Trichloroethane	750	807	108	(78-121)
1,1-Dichloroethane	750	773	103	(76-125)
1,1-Dichloroethene	750	797	106	(70-131)
1,1-Dichloropropene	750	814	109	(76-125)
1,2,3-Trichlorobenzene	750	763	102	(66-130)
1,2,3-Trichloropropane	750	796	106	(73-125)
1,2,4-Trichlorobenzene	750	756	101	(67-129)
1,2,4-Trimethylbenzene	750	745	99	(75-123)
1,2-Dibromo-3-chloropropane	750	913	122	(61-132)
1,2-Dibromoethane	750	791	105	(78-122)
1,2-Dichlorobenzene	750	745	99	(78-121)
1,2-Dichloroethane	750	839	112	(73-128)
1,2-Dichloropropane	750	758	101	(76-123)
1,3,5-Trimethylbenzene	750	771	103	(73-124)
1,3-Dichlorobenzene	750	710	95	(77-121)
1,3-Dichloropropane	750	792	106	(77-121)
1,4-Dichlorobenzene	750	733	98	(75-120)
2,2-Dichloropropane	750	916	122	(67-133)
2-Butanone (MEK)	2250	2160	96	(51-148)
2-Chlorotoluene	750	749	100	(75-122)
2-Hexanone	2250	2470	110	(53-145)
4-Chlorotoluene	750	760	101	(72-124)
4-Isopropyltoluene	750	740	99	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2500	111	(65-135)
Acetone	2250	2080	93	(36-164)
Benzene	750	719	96	(77-121)
Bromobenzene	750	742	99	(78-121)
Bromochloromethane	750	761	101	(78-125)
Bromodichloromethane	750	821	109	(75-127)
Bromoform	750	859	115	(67-132)
Bromomethane	750	672	90	(53-143)

Print Date: 10/25/2019 4:15:30PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34970]

Blank Spike Lab ID: 1534617

Date Analyzed: 09/25/2019 15:17

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Blank Spike (ug/Kg)			CL
	Spike	Result	Rec (%)	
Carbon disulfide	1130	1240	111	(63-132)
Carbon tetrachloride	750	839	112	(70-135)
Chlorobenzene	750	739	99	(79-120)
Chloroethane	750	697	93	(59-139)
Chloromethane	750	693	92	(50-136)
cis-1,2-Dichloroethene	750	750	100	(77-123)
cis-1,3-Dichloropropene	750	857	114	(74-126)
Dibromochloromethane	750	830	111	(74-126)
Dibromomethane	750	829	110	(78-125)
Dichlorodifluoromethane	750	723	96	(29-149)
Ethylbenzene	750	726	97	(76-122)
Freon-113	1130	1290	114	(66-136)
Hexachlorobutadiene	750	708	94	(61-135)
Isopropylbenzene (Cumene)	750	755	101	(68-134)
Methylene chloride	750	742	99	(70-128)
Methyl-t-butyl ether	1130	1140	101	(73-125)
Naphthalene	750	808	108	(62-129)
n-Butylbenzene	750	742	99	(70-128)
n-Propylbenzene	750	766	102	(73-125)
o-Xylene	750	707	94	(77-123)
P & M -Xylene	1500	1410	94	(77-124)
sec-Butylbenzene	750	728	97	(73-126)
Styrene	750	754	101	(76-124)
tert-Butylbenzene	750	744	99	(73-125)
Tetrachloroethene	750	793	106	(73-128)
Toluene	750	683	91	(77-121)
trans-1,2-Dichloroethene	750	731	98	(74-125)
trans-1,3-Dichloropropene	750	913	122	(71-130)
Trichloroethene	750	818	109	(77-123)
Trichlorofluoromethane	750	1270	170	* (62-140)
Vinyl acetate	750	842	112	(50-151)
Vinyl chloride	750	675	90	(56-135)
Xylenes (total)	2250	2120	94	(78-124)

Print Date: 10/25/2019 4:15:30PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34970]
 Blank Spike Lab ID: 1534617
 Date Analyzed: 09/25/2019 15:17

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Blank Spike (%)			CL
	Spike	Result	Rec (%)	
Surrogates				
1,2-Dichloroethane-D4 (surr)	750	112	112	(71-136)
4-Bromofluorobenzene (surr)	750	107	107	(55-151)
Toluene-d8 (surr)	750	97.1	97	(85-116)

Batch Information

Analytical Batch: **VMS19497**
 Analytical Method: **SW8260C**
 Instrument: **VRA Agilent GC/MS 7890B/5977A**
 Analyst: **KAJ**

Prep Batch: **VXX34970**
 Prep Method: **SW5035A**
 Prep Date/Time: **09/25/2019 06:00**
 Spike Init Wt./Vol.: 750 ug/Kg Extract Vol: 25 mL
 Dupe Init Wt./Vol.: Extract Vol:



Matrix Spike Summary

Original Sample ID: 1195593006
 MS Sample ID: 1534622 MS
 MSD Sample ID: 1534623 MSD

Analysis Date: 09/25/2019 20:00
 Analysis Date: 09/25/2019 17:26
 Analysis Date: 09/25/2019 17:42
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Sample	Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1,1,2-Tetrachloroethane	11.3U	790	858	109	790	844	107	78-125	1.50	(< 20)
1,1,1-Trichloroethane	14.2U	790	962	122	790	944	119	73-130	1.90	(< 20)
1,1,2,2-Tetrachloroethane	1.13U	790	821	104	790	799	101	70-124	2.70	(< 20)
1,1,2-Trichloroethane	0.453U	790	860	109	790	877	111	78-121	2.10	(< 20)
1,1-Dichloroethane	14.2U	790	824	104	790	930	118	76-125	12.00	(< 20)
1,1-Dichloroethene	14.2U	790	893	113	790	800	101	70-131	10.90	(< 20)
1,1-Dichloropropene	14.2U	790	893	113	790	871	110	76-125	2.50	(< 20)
1,2,3-Trichlorobenzene	28.3U	790	636	81	790	769	97	66-130	18.90	(< 20)
1,2,3-Trichloropropane	0.565U	790	865	110	790	824	104	73-125	4.80	(< 20)
1,2,4-Trichlorobenzene	14.2U	790	714	90	790	765	97	67-129	6.80	(< 20)
1,2,4-Trimethylbenzene	28.3U	790	813	103	790	764	97	75-123	6.30	(< 20)
1,2-Dibromo-3-chloropropane	56.5U	790	932	118	790	967	122	61-132	3.60	(< 20)
1,2-Dibromoethane	0.565U	790	806	102	790	827	105	78-122	2.60	(< 20)
1,2-Dichlorobenzene	14.2U	790	787	100	790	759	96	78-121	3.60	(< 20)
1,2-Dichloroethane	1.13U	790	890	113	790	893	113	73-128	0.44	(< 20)
1,2-Dichloropropane	5.65U	790	804	102	790	805	102	76-123	0.20	(< 20)
1,3,5-Trimethylbenzene	14.2U	790	825	104	790	756	96	73-124	8.80	(< 20)
1,3-Dichlorobenzene	14.2U	790	780	99	790	732	93	77-121	6.40	(< 20)
1,3-Dichloropropane	5.65U	790	798	101	790	812	103	77-121	1.70	(< 20)
1,4-Dichlorobenzene	14.2U	790	785	99	790	739	94	75-120	6.00	(< 20)
2,2-Dichloropropane	14.2U	790	1019	129	790	984	125	67-133	3.40	(< 20)
2-Butanone (MEK)	142U	2370	2183	92	2370	2370	100	51-148	8.40	(< 20)
2-Chlorotoluene	14.2U	790	811	103	790	769	97	75-122	5.30	(< 20)
2-Hexanone	56.5U	2370	2474	104	2370	2651	112	53-145	6.80	(< 20)
4-Chlorotoluene	14.2U	790	809	102	790	767	97	72-124	5.20	(< 20)
4-Isopropyltoluene	56.5U	790	802	102	790	765	97	73-127	4.90	(< 20)
4-Methyl-2-pentanone (MIBK)	142U	2370	2568	109	2370	2734	115	65-135	6.00	(< 20)
Acetone	142U	2370	2318	98	2370	2578	109	36-164	10.70	(< 20)
Benzene	7.05U	790	760	96	790	760	96	77-121	0.00	(< 20)
Bromobenzene	14.2U	790	805	102	790	757	96	78-121	6.10	(< 20)
Bromochloromethane	14.2U	790	824	104	790	810	103	78-125	1.80	(< 20)
Bromodichloromethane	1.13U	790	873	111	790	866	110	75-127	0.88	(< 20)
Bromoform	14.2U	790	867	110	790	892	113	67-132	2.90	(< 20)
Bromomethane	11.3U	790	794	101	790	737	93	53-143	7.40	(< 20)
Carbon disulfide	56.5U	1185	1455	123	1185	1279	108	63-132	13.20	(< 20)
Carbon tetrachloride	7.05U	790	928	118	790	901	114	70-135	3.00	(< 20)
Chlorobenzene	14.2U	790	758	96	790	744	94	79-120	1.80	(< 20)

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Matrix Spike Summary

Original Sample ID: 1195593006
 MS Sample ID: 1534622 MS
 MSD Sample ID: 1534623 MSD

Analysis Date: 09/25/2019 20:00
 Analysis Date: 09/25/2019 17:26
 Analysis Date: 09/25/2019 17:42
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Sample	Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Chloroethane	113U	790	886	112	790	800	101	59-139	10.20	(< 20)
Chloromethane	14.2U	790	840	106	790	788	100	50-136	6.40	(< 20)
cis-1,2-Dichloroethene	14.2U	790	802	102	790	893	113	77-123	10.70	(< 20)
cis-1,3-Dichloropropene	7.05U	790	920	117	790	912	115	74-126	0.92	(< 20)
Dibromochloromethane	1.13U	790	851	108	790	854	108	74-126	0.46	(< 20)
Dibromomethane	14.2U	790	879	111	790	884	112	78-125	0.48	(< 20)
Dichlorodifluoromethane	28.3U	790	1022	129	790	945	120	29-149	7.90	(< 20)
Ethylbenzene	14.2U	790	742	94	790	739	94	76-122	0.46	(< 20)
Freon-113	56.5U	1185	1424	120	1185	1331	112	66-136	7.20	(< 20)
Hexachlorobutadiene	11.3U	790	1033	131	790	1010	128	61-135	2.30	(< 20)
Isopropylbenzene (Cumene)	14.2U	790	760	96	790	773	98	68-134	1.80	(< 20)
Methylene chloride	56.5U	790	837	106	790	859	109	70-128	2.60	(< 20)
Methyl-t-butyl ether	56.5U	1185	1258	106	1185	1455	122	73-125	14.10	(< 20)
Naphthalene	12.4J	790	761	96	790	850	108	62-129	11.10	(< 20)
n-Butylbenzene	11.9J	790	862	109	790	813	103	70-128	5.90	(< 20)
n-Propylbenzene	14.2U	790	828	105	790	773	98	73-125	6.80	(< 20)
o-Xylene	14.2U	790	716	91	790	720	91	77-123	0.55	(< 20)
P & M -Xylene	28.3U	1580	1445	91	1580	1445	92	77-124	0.33	(< 20)
sec-Butylbenzene	14.2U	790	788	100	790	749	95	73-126	5.00	(< 20)
Styrene	14.2U	790	749	95	790	759	96	76-124	1.20	(< 20)
tert-Butylbenzene	14.2U	790	787	100	790	758	96	73-125	3.80	(< 20)
Tetrachloroethene	7.05U	790	844	107	790	838	106	73-128	0.75	(< 20)
Toluene	14.2U	790	704	89	790	701	89	77-121	0.45	(< 20)
trans-1,2-Dichloroethene	14.2U	790	856	108	790	883	112	74-125	3.10	(< 20)
trans-1,3-Dichloropropene	7.05U	790	944	119	790	935	118	71-130	0.93	(< 20)
Trichloroethene	2.83U	790	885	112	790	869	110	77-123	1.80	(< 20)
Trichlorofluoromethane	28.3U	790	1746	221 *	790	1372	174 *	62-140	24.10 *	(< 20)
Vinyl acetate	56.5U	790	884	112	790	1037	131	50-151	16.10	(< 20)
Vinyl chloride	0.453U	790	741	94	790	715	91	56-135	3.60	(< 20)
Xylenes (total)	42.4U	2370	2162	91	2370	2173	92	78-124	0.40	(< 20)
Surrogates										
1,2-Dichloroethane-D4 (surr)		790	889	113	790	902	114	71-136	1.40	
4-Bromofluorobenzene (surr)		1320	1362	103	1320	1289	98	55-151	5.70	
Toluene-d8 (surr)		790	754	95	790	755	96	85-116	0.21	

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Matrix Spike Summary

Original Sample ID: 1195593006
MS Sample ID: 1534622 MS
MSD Sample ID: 1534623 MSD

Analysis Date:
Analysis Date: 09/25/2019 17:26
Analysis Date: 09/25/2019 17:42
Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

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

Batch Information

Analytical Batch: VMS19497
Analytical Method: SW8260C
Instrument: VRA Agilent GC/MS 7890B/5977A
Analyst: KAJ
Analytical Date/Time: 9/25/2019 5:26:01PM

Prep Batch: VXX34970
Prep Method: Vol. Extraction SW8260 Field Extracted L
Prep Date/Time: 9/25/2019 6:00:00AM
Prep Initial Wt./Vol.: 49.35g
Prep Extract Vol: 25.00mL

Print Date: 10/25/2019 4:15:31PM

Method Blank

Blank ID: MB for HBN 1800128 [VXX/34974]
 Blank Lab ID: 1535032

Matrix: Soil/Solid (dry weight)

QC for Samples:
 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
1,2,4-Trimethylbenzene	25.0U	50.0	15.0	ug/Kg
Chloroform	1.00U	2.00	0.620	ug/Kg
Surrogates				
1,2-Dichloroethane-D4 (surr)	108	71-136		%
4-Bromofluorobenzene (surr)	92.1	55-151		%
Toluene-d8 (surr)	102	85-116		%

Batch Information

Analytical Batch: VMS19499
 Analytical Method: SW8260C
 Instrument: VQA 7890/5975 GC/MS
 Analyst: KAJ
 Analytical Date/Time: 9/27/2019 9:43:00AM

Prep Batch: VXX34974
 Prep Method: SW5035A
 Prep Date/Time: 9/27/2019 6:00:00AM
 Prep Initial Wt./Vol.: 50 g
 Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:32PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34974]

Blank Spike Lab ID: 1535033

Date Analyzed: 09/27/2019 09:59

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Blank Spike (ug/Kg)			CL
	Spike	Result	Rec (%)	
1,2,4-Trimethylbenzene	750	723	96	(75-123)
Chloroform	750	724	97	(78-123)
Surrogates				
1,2-Dichloroethane-D4 (surr)	750	97.6	98	(71-136)
4-Bromofluorobenzene (surr)	750	97.5	98	(55-151)
Toluene-d8 (surr)	750	102	102	(85-116)

Batch Information

Analytical Batch: **VMS19499**

Analytical Method: **SW8260C**

Instrument: **VQA 7890/5975 GC/MS**

Analyst: **KAJ**

Prep Batch: **VXX34974**

Prep Method: **SW5035A**

Prep Date/Time: **09/27/2019 06:00**

Spike Init Wt./Vol.: 750 ug/Kg Extract Vol: 25 mL

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1535039
 MS Sample ID: 1535034 MS
 MSD Sample ID: 1535035 MSD

Analysis Date: 09/27/2019 16:08
 Analysis Date: 09/27/2019 14:48
 Analysis Date: 09/27/2019 15:04
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630011, 1195630014, 1195630017, 1195630018, 1195630019

Results by SW8260C

Parameter	Sample	Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,2,4-Trimethylbenzene	15.0U	449	428	95	449	442	98	75-123	3.20	(< 20)
Chloroform	0.600U	449	450	100	449	453	101	78-123	0.56	(< 20)
Surrogates										
1,2-Dichloroethane-D4 (surr)		449	450	100	449	443	99	71-136	1.60	
4-Bromofluorobenzene (surr)		749	702	94	749	718	96	55-151	2.30	
Toluene-d8 (surr)		449	453	101	449	458	102	85-116	1.30	

Batch Information

Analytical Batch: VMS19499
 Analytical Method: SW8260C
 Instrument: VQA 7890/5975 GC/MS
 Analyst: KAJ
 Analytical Date/Time: 9/27/2019 2:48:01PM

Prep Batch: VXX34974
 Prep Method: Vol. Extraction SW8260 Field Extracted L
 Prep Date/Time: 9/27/2019 6:00:00AM
 Prep Initial Wt./Vol.: 83.47g
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1800164 [VXX/34979]
 Blank Lab ID: 1535277

Matrix: Solid/Soil (Wet Weight)

QC for Samples:
 1195630005, 1195630006, 1195630011, 1195630020

Results by SW8260C-SIM

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
1,2-Dibromoethane	0.0625U	0.125	0.0310	ug/Kg
Surrogates				
4-Bromofluorobenzene (surr)	86.6	55-151		%
Toluene-d8 (surr)	97.7	85-116		%

Batch Information

Analytical Batch: VMS19503
 Analytical Method: SW8260C-SIM
 Instrument: VSA Agilent GC/MS 7890B/5977A
 Analyst: NRB
 Analytical Date/Time: 9/29/2019 9:33:00PM

Prep Batch: VXX34979
 Prep Method: SW5035A
 Prep Date/Time: 9/29/2019 12:30:00AM
 Prep Initial Wt./Vol.: 50 g
 Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:35PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX34979]
 Blank Spike Lab ID: 1535278
 Date Analyzed: 09/29/2019 21:55

Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1195630005, 1195630006, 1195630011, 1195630020

Results by SW8260C-SIM

Parameter	Blank Spike (ug/Kg)			CL (78-122)
	Spike	Result	Rec (%)	
1,2-Dibromoethane	5	4.45	89	
Surrogates				
Toluene-d8 (surr)	750	95.1	95	(85-116)

Batch Information

Analytical Batch: **VMS19503**
 Analytical Method: **SW8260C-SIM**
 Instrument: **VSA Agilent GC/MS 7890B/5977A**
 Analyst: **NRB**

Prep Batch: **VXX34979**
 Prep Method: **SW5035A**
 Prep Date/Time: **09/29/2019 00:30**
 Spike Init Wt./Vol.: 5 ug/Kg Extract Vol: 25 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/25/2019 4:15:37PM

Matrix Spike Summary

Original Sample ID: 1535285
 MS Sample ID: 1535286 MS
 MSD Sample ID: 1535287 MSD

Analysis Date: 09/29/2019 23:34
 Analysis Date: 09/29/2019 22:19
 Analysis Date: 09/29/2019 22:34
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1195630005, 1195630006, 1195630011, 1195630020

Results by SW8260C-SIM

Parameter	Sample	Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,2-Dibromoethane	0.0340U	2.71	2.84	105	2.71	2.88	106	78-122	1.50	(< 20)
Surrogates										
4-Bromofluorobenzene (surr)		679	475	70	679	491	72	55-151	3.30	
Toluene-d8 (surr)		407	393	97	407	389	96	85-116	1.00	

Batch Information

Analytical Batch: VMS19503
 Analytical Method: SW8260C-SIM
 Instrument: VSA Agilent GC/MS 7890B/5977A
 Analyst: NRB
 Analytical Date/Time: 9/29/2019 10:19:00PM

Prep Batch: VXX34979
 Prep Method: 8260SIM (S) SW5035 Prep
 Prep Date/Time: 9/29/2019 12:30:00AM
 Prep Initial Wt./Vol.: 92.10g
 Prep Extract Vol: 25.00mL

Print Date: 10/25/2019 4:15:38PM



Method Blank

Blank ID: MB for HBN 1800350 [VXX/35000]
Blank Lab ID: 1536033
QC for Samples:
1195630020

Matrix: Soil/Solid (dry weight)

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	1.25U	2.50	0.750	mg/Kg
Surrogates				
4-Bromofluorobenzene (surr)	92.7	50-150		%

Batch Information

Analytical Batch: VFC14970
Analytical Method: AK101
Instrument: Agilent 7890 PID/FID
Analyst: ST
Analytical Date/Time: 10/2/2019 6:59:00PM

Prep Batch: VXX35000
Prep Method: SW5035A
Prep Date/Time: 10/2/2019 8:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:39PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX35000]
 Blank Spike Lab ID: 1536034
 Date Analyzed: 10/02/2019 18:23

Spike Duplicate ID: LCSD for HBN 1195630 [VXX35000]
 Spike Duplicate Lab ID: 1536035
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630020

Results by AK101

Parameter	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	12.5	13.4	107	12.5	13.8	110	(60-120)	3.10	(< 20)

Surrogates

4-Bromofluorobenzene (surr)	1.25	98.7	99	1.25	104	104	(50-150)	5.10	
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Batch Information

Analytical Batch: **VFC14970**
 Analytical Method: **AK101**
 Instrument: **Agilent 7890 PID/FID**
 Analyst: **ST**

Prep Batch: **VXX35000**
 Prep Method: **SW5035A**
 Prep Date/Time: **10/02/2019 08:00**
 Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:40PM

Method Blank

Blank ID: MB for HBN 1800402 [VXX/35005]
 Blank Lab ID: 1536247

Matrix: Soil/Solid (dry weight)

QC for Samples:
 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	1.25U	2.50	0.750	mg/Kg
Surrogates				
4-Bromofluorobenzene (surr)	92.6	50-150		%

Batch Information

Analytical Batch: VFC14972
 Analytical Method: AK101
 Instrument: Agilent 7890 PID/FID
 Analyst: ST
 Analytical Date/Time: 10/3/2019 12:06:00PM

Prep Batch: VXX35005
 Prep Method: SW5035A
 Prep Date/Time: 10/3/2019 8:00:00AM
 Prep Initial Wt./Vol.: 50 g
 Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:42PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX35005]
 Blank Spike Lab ID: 1536248
 Date Analyzed: 10/03/2019 11:30

Spike Duplicate ID: LCSD for HBN 1195630 [VXX35005]
 Spike Duplicate Lab ID: 1536249
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006

Results by AK101

Parameter	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	12.5	13.7	109	12.5	13.8	110	(60-120)	0.85	(< 20)

Surrogates

4-Bromofluorobenzene (surr)	1.25	100	100	1.25	105	105	(50-150)	4.40	
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Batch Information

Analytical Batch: **VFC14972**
 Analytical Method: **AK101**
 Instrument: **Agilent 7890 PID/FID**
 Analyst: **ST**

Prep Batch: **VXX35005**
 Prep Method: **SW5035A**
 Prep Date/Time: **10/03/2019 08:00**
 Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:43PM



Method Blank

Blank ID: MB for HBN 1800403 [VXX/35006]
Blank Lab ID: 1536250

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630007, 1195630008, 1195630011, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	1.25U	2.50	0.750	mg/Kg
Surrogates				
4-Bromofluorobenzene (surr)	91.2	50-150		%

Batch Information

Analytical Batch: VFC14972
Analytical Method: AK101
Instrument: Agilent 7890 PID/FID
Analyst: ST
Analytical Date/Time: 10/3/2019 7:25:00PM

Prep Batch: VXX35006
Prep Method: SW5035A
Prep Date/Time: 10/3/2019 8:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:45PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX35006]
 Blank Spike Lab ID: 1536251
 Date Analyzed: 10/03/2019 18:50

Spike Duplicate ID: LCSD for HBN 1195630 [VXX35006]
 Spike Duplicate Lab ID: 1536252
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630007, 1195630008, 1195630011, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018

Results by AK101

Parameter	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	12.5	13.1	105	12.5	13.5	108	(60-120)	2.80	(< 20)

Surrogates

4-Bromofluorobenzene (surr)	1.25	99.1	99	1.25	101	101	(50-150)	2.30	
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Batch Information

Analytical Batch: **VFC14972**
 Analytical Method: **AK101**
 Instrument: **Agilent 7890 PID/FID**
 Analyst: **ST**

Prep Batch: **VXX35006**
 Prep Method: **SW5035A**
 Prep Date/Time: **10/03/2019 08:00**
 Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:46PM



Method Blank

Blank ID: MB for HBN 1800470 [VXX/35018]
Blank Lab ID: 1536632
QC for Samples:
1195630019

Matrix: Soil/Solid (dry weight)

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	1.25U	2.50	0.750	mg/Kg
Surrogates				
4-Bromofluorobenzene (surr)	83.5	50-150		%

Batch Information

Analytical Batch: VFC14973
Analytical Method: AK101
Instrument: Agilent 7890 PID/FID
Analyst: ST
Analytical Date/Time: 10/4/2019 8:32:00PM

Prep Batch: VXX35018
Prep Method: SW5035A
Prep Date/Time: 10/4/2019 8:00:00AM
Prep Initial Wt./Vol.: 50 g
Prep Extract Vol: 25 mL

Print Date: 10/25/2019 4:15:47PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [VXX35018]
 Blank Spike Lab ID: 1536633
 Date Analyzed: 10/04/2019 19:57

Spike Duplicate ID: LCSD for HBN 1195630 [VXX35018]
 Spike Duplicate Lab ID: 1536634
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630019

Results by AK101

Parameter	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	12.5	12.7	101	12.5	13.1	105	(60-120)	3.10	(< 20)

Surrogates

4-Bromofluorobenzene (surr)	1.25	91.2	91	1.25	95.8	96	(50-150)	4.90	
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Batch Information

Analytical Batch: **VFC14973**
 Analytical Method: **AK101**
 Instrument: **Agilent 7890 PID/FID**
 Analyst: **ST**

Prep Batch: **VXX35018**
 Prep Method: **SW5035A**
 Prep Date/Time: **10/04/2019 08:00**
 Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1799991 [XXX/42341]
 Blank Lab ID: 1534381

Matrix: Soil/Solid (dry weight)

QC for Samples:
 1195630005, 1195630006, 1195630011

Results by 8270D SIM (PAH)

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
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)	76.5	58-103		%
Fluoranthene-d10 (surr)	75	54-113		%

Batch Information

Analytical Batch: XMS11756
 Analytical Method: 8270D SIM (PAH)
 Instrument: SVA Agilent 780/5975 GC/MS
 Analyst: DSD
 Analytical Date/Time: 9/29/2019 5:52:00PM

Prep Batch: XXX42341
 Prep Method: SW3550C
 Prep Date/Time: 9/25/2019 8:53:21PM
 Prep Initial Wt./Vol.: 22.5 g
 Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [XXX42341]

Blank Spike Lab ID: 1534382

Date Analyzed: 09/29/2019 18:13

Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630005, 1195630006, 1195630011

Results by 8270D SIM (PAH)

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
1-Methylnaphthalene	111	93.4	84	(43-111)
2-Methylnaphthalene	111	92.2	83	(39-114)
Acenaphthene	111	96.0	86	(44-111)
Acenaphthylene	111	99.6	90	(39-116)
Anthracene	111	101	91	(50-114)
Benzo(a)Anthracene	111	99.9	90	(54-122)
Benzo[a]pyrene	111	100	90	(50-125)
Benzo[b]Fluoranthene	111	105	95	(53-128)
Benzo[g,h,i]perylene	111	112	101	(49-127)
Benzo[k]fluoranthene	111	104	94	(56-123)
Chrysene	111	101	91	(57-118)
Dibenzo[a,h]anthracene	111	110	99	(50-129)
Fluoranthene	111	101	91	(55-119)
Fluorene	111	101	91	(47-114)
Indeno[1,2,3-c,d] pyrene	111	116	104	(49-130)
Naphthalene	111	91.3	82	(38-111)
Phenanthrene	111	99.0	89	(49-113)
Pyrene	111	106	96	(55-117)

Surrogates

2-Methylnaphthalene-d10 (surr)	111	47.2	47	*	(58-103)
Fluoranthene-d10 (surr)	111	49.3	49	*	(54-113)

Batch Information

Analytical Batch: XMS11756

Analytical Method: 8270D SIM (PAH)

Instrument: SVA Agilent 780/5975 GC/MS

Analyst: DSD

Prep Batch: XXX42341

Prep Method: SW3550C

Prep Date/Time: 09/25/2019 20:53

Spike Init Wt./Vol.: 111 ug/Kg Extract Vol: 5 mL

Dupe Init Wt./Vol.: Extract Vol:



Matrix Spike Summary

Original Sample ID: 1195630006
 MS Sample ID: 1534383 MS
 MSD Sample ID: 1534384 MSD

Analysis Date: 09/30/2019 0:02
 Analysis Date: 09/30/2019 0:22
 Analysis Date: 09/30/2019 0:43
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630005, 1195630006, 1195630011

Results by 8270D SIM (PAH)

Parameter	Sample	Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1-Methylnaphthalene	25.8U	117	104	89	115	98.5	86	43-111	5.50	(< 20)
2-Methylnaphthalene	25.8U	117	102	87	115	94.0	82	39-114	7.80	(< 20)
Acenaphthene	25.8U	117	111	95	115	100	87	44-111	10.00	(< 20)
Acenaphthylene	25.8U	117	106	91	115	101	88	39-116	5.50	(< 20)
Anthracene	25.8U	117	123	105	115	111	96	50-114	10.40	(< 20)
Benzo(a)Anthracene	30.3	117	139	94	115	133	89	54-122	5.30	(< 20)
Benzo(a)pyrene	39.0	117	149	94	115	144	92	50-125	2.70	(< 20)
Benzo[b]Fluoranthene	47.2	117	152	90	115	149	88	53-128	2.20	(< 20)
Benzo[g,h,i]perylene	37.4	117	148	95	115	154	101	49-127	3.80	(< 20)
Benzo[k]fluoranthene	25.8U	117	131	112	115	129	112	56-123	1.90	(< 20)
Chrysene	37.0	117	146	94	115	140	90	57-118	4.60	(< 20)
Dibenzo[a,h]anthracene	25.8U	117	119	102	115	117	102	50-129	1.40	(< 20)
Fluoranthene	64.8	117	191	108	115	165	87	55-119	14.30	(< 20)
Fluorene	25.8U	117	118	101	115	105	92	47-114	11.20	(< 20)
Indeno[1,2,3-c,d] pyrene	31.8	117	150	101	115	152	104	49-130	1.50	(< 20)
Naphthalene	20.6U	117	103	88	115	94.5	82	38-111	8.10	(< 20)
Phenanthrene	55.3	117	189	115 *	115	142	76	49-113	28.10	* (< 20)
Pyrene	63.1	117	190	109	115	169	92	55-117	12.20	(< 20)
Surrogates										
2-Methylnaphthalene-d10 (surr)		117	89.8	77	115	84.6	74	58-103	5.90	
Fluoranthene-d10 (surr)		117	86.0	74	115	83.8	73	54-113	2.60	

Batch Information

Analytical Batch: XMS11756
 Analytical Method: 8270D SIM (PAH)
 Instrument: SVA Agilent 780/5975 GC/MS
 Analyst: DSD
 Analytical Date/Time: 9/30/2019 12:22:00AM

Prep Batch: XXX42341
 Prep Method: Sonication Extr Soil 8270 PAH SIM 5ml
 Prep Date/Time: 9/25/2019 8:53:21PM
 Prep Initial Wt./Vol.: 22.56g
 Prep Extract Vol: 5.00mL

Print Date: 10/25/2019 4:15:52PM



Method Blank

Blank ID: MB for HBN 1800046 [XXX/42347]
Blank Lab ID: 1534586

Matrix: Soil/Solid (dry weight)

QC for Samples:

1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007, 1195630008, 1195630011, 1195630013, 1195630014, 1195630015, 1195630016, 1195630017, 1195630018, 1195630019

Results by AK102

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Diesel Range Organics	10.0U	20.0	6.20	mg/Kg
Surrogates				
5a Androstane (surr)	87.9	60-120		%

Batch Information

Analytical Batch: XFC15361
Analytical Method: AK102
Instrument: Agilent 7890B F
Analyst: CMS
Analytical Date/Time: 10/2/2019 6:18:00PM

Prep Batch: XXX42347
Prep Method: SW3550C
Prep Date/Time: 9/26/2019 5:33:28PM
Prep Initial Wt./Vol.: 30 g
Prep Extract Vol: 5 mL

Print Date: 10/25/2019 4:15:53PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195630 [XXX42347]
 Blank Spike Lab ID: 1534587
 Date Analyzed: 10/02/2019 18:38

Spike Duplicate ID: LCSD for HBN 1195630
 [XXX42347]
 Spike Duplicate Lab ID: 1534588
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1195630001, 1195630002, 1195630003, 1195630004, 1195630005, 1195630006, 1195630007,
 1195630008, 1195630011, 1195630013, 1195630014, 1195630015, 1195630016, 1195630017,
 1195630018, 1195630019

Results by AK102

Parameter	Blank Spike (mg/Kg)			Spike Duplicate (mg/Kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Diesel Range Organics	833	781	94	833	807	97	(75-125)	3.20	(< 20)
Surrogates									
5a Androstane (surr)	16.7	98.6	99	16.7	103	103	(60-120)	4.20	

Batch Information

Analytical Batch: **XFC15361**
 Analytical Method: **AK102**
 Instrument: **Agilent 7890B F**
 Analyst: **CMS**

Prep Batch: **XXX42347**
 Prep Method: **SW3550C**
 Prep Date/Time: **09/26/2019 17:33**
 Spike Init Wt./Vol.: 833 mg/Kg Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 833 mg/Kg Extract Vol: 5 mL



1195630



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CLIENT: EMI Alaska		Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.				Page 1 of 2						
CONTACT: Glenn Hasburgh		PHONE #:		Section 3		Preservative						
Section 1	PROJECT NAME: UST 0204 Closure	PROJECT/PWSID/PERMIT#: 18021		# CONTAINERS	Analysis* GRO by AK101, VOC by 8260C, EDB by 8260C SIM, DRO by AK102, Lead by 6020, PAH by 8270D SIM						NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS	
	REPORTS TO: Glenn Hasburgh	E-MAIL: ghasburgh@emi-alaska.com										
	INVOICE TO: EMI Alaska	QUOTE #: P.O. #:										
Section 2	RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE							REMARKS/LOC ID
	①	Gas-Disp-02	9/17/19	0916	5							
	②	Diesel-Disp-01	9/17/19	0805								
	③	Sump-1		0945								
	④	EX-1		1616								
	⑤	EX-9		1620								
	⑥	EX-19		1920								
	⑦	EX-12		1625								
	⑧	EX-14		1635								
	⑨	NSW-6		1646								Hold
⑩	ESW-3		1641								Hold	
Section 5	Relinquished By: (1)	Date	Time	Received By:	Section 4 DOD Project? Yes No		Data Deliverable Requirements:					
	Relinquished By: (2)	Date	Time	Received By:	Cooler ID:		Requested Turnaround Time and/or Special Instructions:					
	Relinquished By: (3)	Date	Time	Received By:	Temp Blank °C: 2.9 57		Chain of Custody Seal: (Circle) INTACT BROKEN <u>ABSENT</u>					
	Relinquished By: (4)	Date	Time	Received For Laboratory By:	or Ambient []		Delivery Method: Hand Delivery [] Commercial Delivery []					

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SGS North America Inc.
CHAIN OF CUSTODY RECORD

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CLIENT: EMI Alaska		Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.				Page <u>2</u> of <u>2</u>						
CONTACT: Glenn Hasburgh		PHONE #:		Section 3	Preservative							
PROJECT NAME: UST 0204 Closure		PROJECT/ PWSID/ PERMIT#: 18021		# C O N T A I N E R S	Analysis* GRO by AK101 VOC by 8260C EDB by 8260C SIM DRO by AK102 Lead by 6020 PAH by 8270D SIM						NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS	
REPORTS TO: Glenn Hasburgh		E-MAIL: ghasburgh@emi-alaska.com										
INVOICE TO: EMI Alaska		QUOTE #:										
P.O. #:		Profile #:										
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	Comp Grab MI (Multi-incremental)	Analysis*						REMARKS/LOC ID
(1) AB	SSW-1	9/17	1652	S	G	X						
(2) AB	WSW-9		1638			X						Hold
(3) A	Base-test pit		1730			X						
(14) AB	St-1-7	9/18	0902			X						
(15) AB	St-1-16		0919			X						
(16) AB	St-1-22		0930			X						
(17) AB	St-1-5		0852			X						
(18) AB	Con-st-1		1037			X						
(19) AB	Con-st-7 TAMP Blot		1043			X						
Relinquished By: (1) <i>[Signature]</i>		Date 9/23/19	Time 10:49	Received By: <i>[Signature]</i>		Section 4	DOD Project? Yes No		Data Deliverable Requirements:			
Relinquished By: (2) <i>[Signature]</i>		Date	Time	Received By:		Cooler ID:						
Relinquished By: (3) <i>[Signature]</i>		Date	Time	Received By:		Requested Turnaround Time and/or Special Instructions: Standard.						
Relinquished By: (4) <i>[Signature]</i>		Date 9-23-19	Time 10:49	Received For Laboratory By: <i>[Signature]</i>		Temp Blank °C: 2.9 D57		Chain of Custody Seal: (Circle) INTACT BROKEN <u>ABSENT</u>				
Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/>												

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Returned Bottles Inventory

Name of individual returning bottles:

Date

Received:

09/23/19

Client Name:

EMI Alaska

Received by:

E.M.

Project Name:

UST 0204 Closure 18021

SGS PM:

JKJ

HDPE/Nalgene:	1-L				
	500-ml				
	250-ml or 8-oz				
	125-ml or 4-oz				
	60-ml or 2-oz				
	other				
amber glass:	1-L				
	500-ml				
	250-ml or 8-oz				
	125-ml or 4-oz with or without septa	8			
	40-ml VOA vial	6			
	other				
Subtotal:		14			

Note: Returned bottles (regardless of size/pres.) are billed back at \$4/bottle unless otherwise quoted.

Amount to Invoice Client \$:

56

WO#:

119 5630



e-Sample Receipt Form

SGS Workorder #:

1195630



1 1 9 5 6 3 0

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		<input checked="" type="checkbox"/> Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	HD
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?		
<input type="checkbox"/> **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 @ 2.9 °C Therm. ID: D57
		Cooler ID: @ °C Therm. ID:
		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	
Were proper containers (type/mass/volume/preservative***) used?	Yes	***Exemption permitted for metals (e.g.200.8/6020A).
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):		
PAH container received For Sample 3 However PAH is not requested login as an extra volume.		



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1195630001-A	No Preservative Required	OK			
1195630001-B	Methanol field pres. 4 C	OK			
1195630002-A	No Preservative Required	OK			
1195630002-B	Methanol field pres. 4 C	OK			
1195630003-A	No Preservative Required	OK			
1195630003-B	No Preservative Required	OK			
1195630003-C	Methanol field pres. 4 C	OK			
1195630004-A	No Preservative Required	OK			
1195630004-B	Methanol field pres. 4 C	OK			
1195630005-A	No Preservative Required	OK			
1195630005-B	No Preservative Required	OK			
1195630005-C	Methanol field pres. 4 C	OK			
1195630006-A	No Preservative Required	OK			
1195630006-B	No Preservative Required	OK			
1195630006-C	Methanol field pres. 4 C	OK			
1195630007-A	No Preservative Required	OK			
1195630007-B	Methanol field pres. 4 C	OK			
1195630008-A	No Preservative Required	OK			
1195630008-B	Methanol field pres. 4 C	OK			
1195630009-A	No Preservative Required	OK			
1195630009-B	Methanol field pres. 4 C	OK			
1195630010-A	No Preservative Required	OK			
1195630010-B	Methanol field pres. 4 C	OK			
1195630011-A	No Preservative Required	OK			
1195630011-B	Methanol field pres. 4 C	OK			
1195630012-A	No Preservative Required	OK			
1195630012-B	Methanol field pres. 4 C	OK			
1195630013-A	No Preservative Required	OK			
1195630014-A	No Preservative Required	OK			
1195630014-B	Methanol field pres. 4 C	OK			
1195630015-A	No Preservative Required	OK			
1195630015-B	Methanol field pres. 4 C	OK			
1195630016-A	No Preservative Required	OK			
1195630016-B	Methanol field pres. 4 C	OK			
1195630017-A	No Preservative Required	OK			
1195630017-B	Methanol field pres. 4 C	OK			
1195630018-A	No Preservative Required	OK			
1195630018-B	Methanol field pres. 4 C	OK			
1195630019-A	No Preservative Required	OK			
1195630019-B	Methanol field pres. 4 C	OK			
1195630020-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 that 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:

Glenn Hasburgh

Title:

Environmental Scientist

Date:

11/08/2019

CS Report Name:

Report Date:

10/25/2019

Consultant Firm:

Environmental Management, Inc.

Laboratory Name:

SGS

Laboratory Report Number:

1195630

ADEC File Number:

Hazard Identification Number:

1. Laboratory

- a. Did an ADEC CS approved laboratory receive and
- perform
- all of the submitted sample analyses?

 Yes No

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

Comments:

2. Chain of Custody (CoC)

- a. CoC information completed, signed, and dated (including released/received by)?

 Yes No

Comments:

- b. Correct Analyses requested?

 Yes No

Comments:

3. Laboratory Sample Receipt Documentation

- a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

 Yes No

Comments:

- b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

 Yes No

Comments:

- c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

 Yes No

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

Comments:

There were no discrepancies.

- e. Data quality or usability affected?

Comments:

No, there is nothing to indicate data quality or usability has been affected.

4. Case Narrative

- a. Present and understandable?

Yes No

Comments:

- b. Discrepancies, errors, or QC failures identified by the lab?

Yes No

Comments:

- c. Were all corrective actions documented?

Yes No

Comments:

- d. What is the effect on data quality/usability according to the case narrative?

Comments:

Matrix interference affected surrogate recoveries and LOQs in some samples. Other QC issues do not have an impact on data quality.

5. Samples Results

- a. Correct analyses performed/reported as requested on COC?

Yes No

Comments:

- b. All applicable holding times met?

Yes No

Comments:

c. All soils reported on a dry weight basis?

Yes No

Comments:

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

Yes No

Comments:

Multiple VOC analytes have LOQs above cleanup levels

e. Data quality or usability affected?

Yes No

Comments:

The elevated LOQs do affect quality but data is still usable.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

Yes No

Comments:

ii. All method blank results less than limit of quantitation (LOQ)?

Yes No

Comments:

iii. If above LOQ, what samples are affected?

Comments:

NA, all were below LOQ

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes No

Comments:

NA, there were no affected samples.

v. Data quality or usability affected?

Comments:

No, there is nothing to indicate data quality or usability has been affected.

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

Comments:

- ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes No

Comments:

- iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes No

Comments:

Recovery for trichlorofluoromethane was high in one LC>

- iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes No

Comments:

%R was high for same analyte.

- v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

None, trichlorofluoromethane was not detected in project samples.

- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes No

Comments:

- vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

No, there is nothing to indicate data quality or usability has been affected.

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

 Yes No

Comments:

--

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

 Yes No

Comments:

There were various surrogate failures due to matrix interference.

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

 Yes No

Comments:

--

iv. Data quality or usability affected?

Comments:

There may be some impact to accuracy within the samples with high matrix interference, but this does not affect usability.
--

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

 Yes No

Comments:

--

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

 Yes No

Comments:

NA only one cooler was used.

iii. All results less than LOQ?

 Yes No

Comments:

--

iv. If above LOQ, what samples are affected?

Comments:

NA

v. Data quality or usability affected?

Comments:

NA

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes No

Comments:

One duplicate was submitted for the entire project.

ii. Submitted blind to lab?

Yes No

Comments:

iii. Precision – All relative percent differences (RPD) less than specified DQOs?

(Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes No

Comments:

For primary contaminants of concern, GRO and DRO.

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

There is nothing to indicate data quality or usability has been affected.

f. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below).

Yes No Not Applicable

Only disposable equipment was used.

i. All results less than LOQ?

Yes No

Comments:

NA

ii. If above LOQ, what samples are affected?

Comments:

NA

iii. Data quality or usability affected?

Comments:

NA

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

a. Defined and appropriate?

Yes No

Comments:

Appendix D
Site Assessment and Release
Investigation Summary Form



APPENDIX B



ADEC Storage Tank Program
Site Assessment & Release Investigation Summary Form

This document summarizes information from site assessments and release investigation reports that are required by Alaska's Underground Storage Tanks Regulations (18 AAC 78). It is intended to ensure minimum requirements are met when submitting full reports to ADEC. It cannot be substituted for comprehensive site assessment or release investigation reports. Site assessments (as defined in AS 46.03.450) are conducted to check for the presence or absence of petroleum contamination. If contamination of soil or groundwater is identified then a release investigation is required. Site assessments and release investigations must be conducted by a qualified impartial third party (as defined in 18 AAC 78) and in accordance with chapter two of the Underground Storage Tanks Procedures Manual (UST Manual).

How to fill out this form

Type or print in ink the requested information and sign in ink the "signature" blocks on page 7. Please attach this form to the comprehensive site assessment or release investigation report (or include it in the report introduction) and submit it to the nearest ADEC field operations office (Juneau, Anchorage, Fairbanks or Soldotna).

1. GENERAL INFORMATION

Purpose of Site assessment/ Release investigation: Closure
(Closure, Change-in-service, Suspected or confirmed release, Compliance check, Other)

Owner of site: American Village of Alaska, Inc. 907-822-3111
Name of company/legal entity that owns the site Phone number
Po Box 329 Glennallen, AK 99588
Mailing address City, State, Zip code

Operator of site: Same
Name of company/legal entity that operates the site Phone number
Mailing address of operator City, State, Zip code

Location of site: Glennallen Fuel and Service 907-822-3503
Name of site (e.g. John Doe's Service Station) Phone number
Mile 187 Glenn Highway Glennallen, AK 99588
Physical address of site (be as specific as possible) City, State, Zip code
Legal description of site Section/township/range
Gas Station 2292
Type of business at site Facility ID # / Tank ID number(s)

Handwritten signature/initials

Financial Assistance
 Applications filed Site assessment/ Tank cleanup Tank upgrade Tank closure
 (this site only) tightness test

Reports on file
 with ADEC: Tightness test Closure notice Other _____

2. SYSTEM AND TANK STATUS

Describe the status, size, and contents of the tanks that have been at the site:

Tank ID Number:	Tank No. <u>1</u>	Tank No. <u>2</u>	Tank No. <u>3</u>	Tank No. <u>4</u>	Tank No. <u>5</u>	<u>6</u>	<u>7</u>
Tank status (check one)							
Currently in use	_____	_____	_____	_____	_____	_____	_____
Temporarily closure	_____	_____	_____	_____	_____	_____	_____
Closed/left in place	_____	_____	_____	_____	_____	_____	_____
Closed/removed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Total capacity (gallons)	<u>10,000</u>	<u>12,000</u>	<u>7,000</u>	<u>5,000</u>	<u>10,000</u>	<u>8,000</u>	<u>12,000</u>
Contents (diesel, etc)	<u>gasoline</u>	<u>gasoline</u>	<u>gasoline</u>	<u>gasoline</u>	<u>gasoline + diesel</u>	<u>gasoline</u>	<u>gasoline</u>

3. FIRM CONDUCTING SITE ASSESSMENT AND RELEASE INVESTIGATION

Environmental Management, Inc 907-272-9336
 Name of firm Phone number

206 E. Fireweed Way Suite 201 Anchorage, AK 99503
 Mailing address City, State, Zip code

Glenn Hasburgh Glenn Hasburgh
 Site assessment supervisor(s) Person(s) collecting samples

(JAM)

4. SITE HISTORY

Based on the best available knowledge, please check the appropriate box below:

Y N

Was soil contamination observed or identified?

Was groundwater contamination observed or identified?

Did inventory control or prior tank repairs indicate a possible release?

Has a tank tightness test been performed on any USTs on the site?

Have any of the facility's USTs or piping ever failed a tightness test?

Have there been any previous site assessments performed at this site?

Do previous site assessments indicate any contamination has occurred?

If the answer to any of these questions is yes, please describe (or attach copy of report discussion). Give dates and circumstances, use continuation sheet if necessary:

5. FIELD SCREENING ANALYSIS

Date(s) of field screening: 9/16-17/2019
Temperature(s) during screening: 45-55 °F
Estimated wind speeds: 0-10 mph
Weather (clear, raining, etc): cloudy

Type of field detection instrument used: Mini Roe PID
Brand: Mini Roe
Model: 3000
Date calibrated: 9/16/19

Number of tests: 100
Range of results: 0-888

If an instrument wasn't used, what field detection method was used? _____

Number of tests: _____
Range of results: _____

JAM

6. COLLECTION OF SOIL SAMPLES

For site assessments done for USTs remaining in place

Check the appropriate boxes below (if not applicable, leave blank):

- | Y | N | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Were samples taken from borings (or test pits) within 5 feet of the UST? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were samples collected from within 2 feet below the bottom of the UST? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were dispensers connected to the UST system? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were samples taken from borings (or test pits) adjacent to dispensers? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were samples taken from borings (or test pits) adjacent to piping? |

How many borings/pits were made? _____ How many samples were analyzed? _____

For site assessments done at excavation and removal of USTs:

Check the appropriate boxes below (if not applicable, leave blank):

- | Y | N | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were any areas of obvious contamination identified or observed? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were samples taken from areas of obvious contamination? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were at least two discrete analytical samples taken from excavated pit area? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Was at least one sample taken from below each dispensing island's piping? |
| <input type="checkbox"/> | <input type="checkbox"/> | Was at least one sample taken from the piping trench? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were the samples referenced above collected taken from native soil within two feet below the bottom of the tank pit or dispenser/piping trench? |
| <input type="checkbox"/> | <input type="checkbox"/> | If multiple tanks were removed, were at least three samples collected? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were additional samples collected for each 250 square feet of excavated pit over 250 square feet? |

Number of distinct points sampled: 4 Estimated excavation's surface area: 666

For all site assessments

Check the appropriate boxes below:

- | Y | N | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were field duplicate samples collected and analyzed? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were all samples kept at the appropriate temperature until analysis? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were all samples extracted & analyzed within recommended holding times? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Did chain-of-custody/transfer logs accompany samples to laboratory? |

(JAW)

7. LABORATORY ANALYSIS OF SOIL SAMPLES

(see Table 1 of UST Procedures Manual or Table G of 18 AAC 78.800(b))

Identify the possible contaminants (gasoline, BTEX, diesel, etc.): DRO, GRO, VOC, PAH

Please list the analytical methods used to detect these contaminants in the soil samples, the number of samples analyzed by each method, and the range of results for each method:

Possible product	Analytical method	Number of samples	Range of results	Location(s) of sample point(s) w/ highest level of contamination
<u>See attached</u>	<u>Report</u>	<u>Report</u>	<u>Report</u>	<u>Report</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

8. GROUNDWATER INVESTIGATION

Check the appropriate boxes below:

- | | | |
|--------------------------|--------------------------|---|
| Y | N | |
| <input type="checkbox"/> | <input type="checkbox"/> | Was groundwater encountered during the excavation or drilling work? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were borings drilled/pits dug at least five feet below the USTs bottom? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is groundwater or seasonal high water table known or suspected to exist within five feet of the bottom of the USTs? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were samples taken from borings drilled/test pits dug to this water level? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were all these samples analyzed within recommended holding times? |

How many groundwater/saturated-soil samples were collected & analyzed? _____

How many of these samples were taken from the top 6" of water table? _____

How many field QC samples were analyzed? _____

Trip blanks

Duplicates

Decon blanks

JAM

9. LABORATORY ANALYSIS OF GROUNDWATER SAMPLES

(see Table 1 of UST Procedures Manual or Table G of 18 AAC 78.800(b))

Identify the possible contaminants at the site: _____

Identify the analytical methods used to detect these contaminants in the water samples, the number of samples analyzed by each method, and the range of results for each method:

Analytical method	Number of samples	Range of results (ppm)	Location(s) of sample point with highest level of contamination
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

10. DISPOSAL OF MATERIALS

Check the appropriate boxes below (if not applicable, leave blank):

- Y N
 Were tanks cleaned in accordance with API 2015 (Cleaning Petroleum Storage Tanks)?
 Were the tanks and piping removed and disposed in accordance with API 1604 (Removal and disposal of used petroleum Storage tanks)?

Where were the tanks and piping disposed? Sold to private party

Where was the tank sludge and rinsewater disposed? NRC Alaska LLC

11. STOCKPILES

Check the appropriate boxes below:

- Y N
 Is any soil stockpiled at the site?
 Are soils stockpiled in accordance with 18 AAC 78.311?

JAM

12. RELEASE INVESTIGATION

Check the appropriate box below: *SEE Report*

Y N
Was any petroleum contamination identified during site assessment?
(Answer "yes" if any evidence a release occurred; if no, proceed to item 13)

If contamination was found, what was matrix score for site? _____
(Attach completed matrix score sheet to this form)

When did release occur? _____ When was release confirmed? _____
(Date & time) (Date & time)

When was ADEC notified? _____ List ADEC staff notified: _____
(Date & time) (Name)

What is status of UST that prompted the investigation? _____
In use Out-of-use, product still in system Out-of-use; system empty Permanently closed

Briefly describe (or attach copy of report discussion) the steps taken to prevent further migration of the release and steps taken to monitor and mitigate fire and safety hazards:

13. SITE SKETCH

Sketch the site in the space below. Alternatively, attach a site map to the back of the form. The sketch (or accompanying narrative) should include the following information:

- locations of all USTs, piping, and dispensers
- distances from tanks to nearby structures
- property line locations
- location and dimensions of excavation(s)
- type of backfill used to surround system
- locations of any known historical releases
- locations of any observed contamination
- location of any boreholes and test pits
- soil types
- field screening locations and readings
- sampling locations, depths, & sample ID numbers
- water wells and monitoring wells (if present)
- depth to groundwater/seasonal high groundwater
- locations of any stockpiled soils
- north arrow
- bar scale (specify feet or meters)

For release investigations, in addition to the above information, show the groundwater gradient; surface drainages (including potential hydraulic connections with groundwater) and utility trenches.

JM

14. QUALITY ASSURANCE

Check the appropriate boxes below:

Y N

— Were there deviations from Chapter 2 of the UST Procedures Manual? (Note that any deviations must be documented in a section of the comprehensive report)

— Is a field quality control summary included in the reports?

— Is a laboratory QC summary included in the report for all samples used to verify cleanup levels have been met?

15. CERTIFICATION

The following certification is to be signed by the assessment firm's principal investigator or Quality Assurance Officer:

I certify that except as specifically noted in this report, all statements and data appearing in this report are in conformance with the provisions of Chapter 2 of the UST Procedures Manual.

Gloria Hasbungh
(Print name)

[Signature]
(Signature)

Environmental Scientist/Project Manager
(Title)

11/11/19
(Date)

The following certification is to be signed by the UST owner/operator (or designated representative):

I certify that I have personally examined and am familiar with the information in this and all attached documents and based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

James A. Majors
(Print name)

[Signature]
(Signature)

Mile 186.5 Glenn Highway
(Street Address)

General Manager, American Village of Alaska
(Specify if owner, operator, representative)

08/31/2020
(Date)

Glennallen, AK 99588
(City, State, Zip)

16. ATTACHMENTS

Please check the boxes showing any comprehensive reports attached to this summary:

Site Assessment Report (include if no release investigation is needed)

Release Investigation Report (include if release investigation is needed)

Appendix E
NRC Receipt and Bill of Sale

NON-HAZARDOUS WASTE MANIFEST

CUSTOMER DROP OFF

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

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. VSQG		Manifest Document No. 144603-A	2. Page 1 of 1
3. Generator's Name and Mailing Address Glenn Allen Fuel MP 187 GLENN HWY GLENNALLEN, AK 99588		Glenn Allen Fuel MP 187 GLENN HWY GLENNALLEN, AK 99588			
4. Generator's Phone () 907-320-0756					
5. Transporter 1 Company Name Glenn Allen Fuel		6. US EPA ID Number VSQG		A. State Transporter's ID	
				B. Transporter 1 Phone	
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	
11. WASTE DESCRIPTION			Containers		13. Total Quantity
			No.	Type	14. Unit Wt./Vol.
a. <input checked="" type="checkbox"/> HM <input checked="" type="checkbox"/> UN1993, FLAMMABLE LIQUIDS, N.O.S. (GASOLINE, DIESEL) , 3 , PGII (FLASHPOINT=178F)			2	DM	445
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above) EA0205 (N12493) MIXED FUELS			H. Handling Codes for Wastes Listed Above D26698		
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 <input checked="" type="checkbox"/> Jeremiah Silvey		Signature <i>Jeremiah Silvey</i>		Date 10 22 2019	
17. TRANSPORTER 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name <input checked="" type="checkbox"/> Jeremiah Silvey		Signature <i>Jeremiah Silvey</i>		Date 10 22 2019	
18. TRANSPORTER 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date	
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	

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER

FACILITY

BILL OF SALE

Let it be known that Catherine Verline (Hereinafter referred to as the "Buyer") agrees to purchase from American Village of AR (Hereinafter referred to as the "Seller") for the price of \$ 102 (US Dollars) for the following item (Hereinafter referred to as the "Underground Storage Tank"):

Description: 10,000 Gal ¼ DBL Wall Pre Engineered STI-P3 Steel Tank Institute Compliance Tag#2292 Owner Tank #4&5 UST Tank.

Make: Anchorage Tank **Serial #:** _____ **Year:** 1991

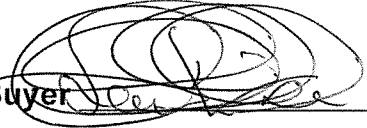
The date of the transfer of funds and the possession of the equipment shall occur on the 14 day of October, 2019. Seller acknowledges that they have the full ownership rights and is legally allowed to sell the UST Tank.

Buyer acknowledges that the underground storage tank has been cleaned and plugged with a 1/8" vent hole per federal and state regulations in accordance to 18 ACC 78. In addition, the Seller is transferring the underground storage tank with no warranties and strictly in "as-is" condition. At this time the underground storage tank is labeled "TANK HAS CONTAINED LEADED GASOLINE NOT SUITABLE FOR STORAGE OR LIQUIDS INTENDED FOR HUMAN OR ANIMAL CONSUMPTION." Buyer acknowledges that seller informed purchaser of applicable regulations under, Title 18 AAC 78, Underground Storage Tank regulations. In summary, a underground storage


tank that previously contained gasoline must not be used for drainage culverts or the subsequent storage of food or liquids intended for animal or human consumption.

Buyer accepts full liability for the underground storage tank for damages, and any third-party liability incurred from the use of the tank from the date of sale.

Buyer agrees to move the underground storage tank from the seller's property within two weeks from the date of sale.

Signature of Buyer  Date 10/14/19 Print Benjamin A. Verelin

Signature of Seller Jeremiah Silvey Date 10/14/19 Print Jeremiah Silvey

Signature of Witness  Date 10/14/19 Print Benjamin Facht