

**Everts Air Fuel, Inc.  
Post-Underliner Characterization Report  
Fairbanks, Alaska**

**TL-2320, Section 23  
Township 1S, Range 2W  
5472 Mail Trail Road, Fairbanks, AK**

**ADEC File Nos: 100.23.087, 100.26.141, 100.26.100**

May 11, 2022

Prepared for:

**Everts Air Fuel, Inc.**

Prepared by:

**Alaska Resources and  
Environmental Services, LLC.**



3520 International St.  
Fairbanks, AK 99701

Prepared  
by:



---

Josh Klynstra  
Chemist



## EXECUTIVE SUMMARY

This report summarizes the findings of the post-underliner characterization conducted by Alaska Resources and Environmental Services, LLC (ARES) related to historical stockpiles of contaminated soil that were previously stockpiled on liners in the area of investigation. . The investigation took place at the industrial lot referenced as Everts Air Fuel Inc. located at 5472 Mail Trail Road, Fairbanks, Alaska.

The purpose of this project was to perform a post-underliner characterization and determine if the site was impacted by the storage and subsequent removal of the former contaminated soil stockpiles at the subject site. Site work occurred as specified in the *Everts Air Fuel 5472 Mail Trail Road Corrective Action Work Plan* dated October 5, 2021 v2.

Analytical results indicate that the soils collected from the post underliner area are below ADEC CULs for all tested analytes. DRO, Tetrachloroethene, Xylenes, Trichlorofluoromethane, and several PAH compounds were all detected at concentrations significantly below ADEC CULs. Due to the property's use as a storage yard for various vehicles and machinery and that there are no pre-stockpile underliner samples available for comparison it cannot be determined if the detected analytes are associated with the former stockpile or are historical in nature. All soils remaining in place in the post underliner area are significantly below ADEC CULs and no further action is recommended or warranted.

ARES recommends the following actions:

- 1) ARES recommends that no further action should be required.

## Table of Contents

Post-Underliner Characterization Report.....	1
EXECUTIVE SUMMARY .....	i
Table of Contents.....	ii
Tables.....	iii
Appendices.....	iii
Acronyms and Abbreviations .....	iv
Post-Underliner Characterization .....	1
1.0 INTRODUCTION .....	1
1.1 Objectives and Scope of Work .....	1
1.2 Project Organization / Personnel .....	1
1.3 Regulatory Framework .....	2
2.0 SITE DESCRIPTION .....	3
2.1 Location .....	3
2.2 History .....	3
3.0 SITE CHARACTERIZATION.....	4
3.1 Field Observations .....	4
3.2 Field Screen Sampling.....	5
Table 1 .....	5
3.3 Analytical Sampling .....	6
3.4 ADEC Target Cleanup Levels .....	7
3.5 Soil Analytical Results .....	7
4.0 CHEMICAL DATA QUALITY REVIEW .....	9
4.1 Introduction.....	9
4.2 Analytical Laboratory and Test Methods .....	9
4.3 Data Review Process .....	10
4.3.1 Data Validation .....	10
4.4 Sample Handling and Chain of Custody .....	11
4.5 Holding Time Compliance .....	11
4.6 Field Quality Assurance/ Quality Control .....	11
4.6.1 Correlation of Field Screen Samples vs. Analytical Results .....	11
4.6.2 Equipment Blanks.....	12
4.6.3 Field Duplicate Samples .....	12
4.6.4 Trip Blank Samples.....	13
4.7 Laboratory Quality Assurance / Quality Control.....	13
4.7.1 Detection Limits.....	13
4.7.2 Method Blanks .....	13
4.7.3 LCS/LCSD.....	13
4.7.4 MS/ MSD.....	13
4.7.5 Surrogates .....	14
5.0 CONCLUSIONS AND RECOMMENDATIONS .....	14
6.0 LIMITATIONS OF INVESTIGATION.....	15

## Tables

Table 1: Field Screen Measurements Summary .....	5
Table 2: Summary of Detected Analytical Results in Soil (except PAH) .....	7
Table 3: Summary of PAH Analytical Results [EPA8270D SIM] in Soil .....	8
Table 4: Field Screen Sample and Analytical Sample Correlation .....	11
Table 5: Relative Percent Difference Calculations for Soil.....	12

## Appendices

Appendix A: Figures
Appendix B: Photographs
Appendix C: Analytical Summary Table
Appendix D: Field Notes
Appendix E: Laboratory Analytical Report & ADEC Lab Quality Checklist

## Acronyms and Abbreviations

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ARES	Alaska Resources and Environmental Services, LLC
AST	Above ground Storage Tank
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
COC	Chain of Custody
Cy	Cubic Yards
°C	Degrees Celsius
DL	Detection Limit
DRO	Diesel Range Organics
EPA	Environmental Protection Agency
ESA	EPA Environmental Protection Agency
°F	Degrees Fahrenheit
FS	Field Screen
GRO	Gasoline Range Organics
HS	Headspace
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
mg/kg	Milligrams per kilogram
mg/l	Milligrams per liter
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
ND	Non-Detect
PAH	Polycyclic Aromatic Hydrocarbon
PID	Photoionization Detector
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA	Quality Assurance
QC	Quality Control
RI	Release Investigation
RPD	Relative Percent Difference
TB	Trip Blank
USGS	United States Geological Survey

## Post-Underliner Characterization

### 1.0 INTRODUCTION

This report summarizes the findings of the Post-Underliner Characterization conducted by Alaska Resources and Environmental Services, LLC (ARES) for the subject property referenced as Everts Air Fuel Inc. located at 5472 Mail Trail Road, Fairbanks, Alaska. The Alaska Department of Environmental Conservation (ADEC) File Numbers for the site are: 100.23.087, 100.26.141 and 100.26.100.

The investigation of the site was conducted on October 6, 2021 at the request of Everts Air Fuel Inc., staff. This report contains a summary of on-site field work and includes field observations and analytical data from sampling activities.

### 1.1 Objectives and Scope of Work

The purpose of this project was to perform post-underliner sampling after the removal of a contaminated soil stockpile. A grid was measured over the area of the former stockpile and soil field screen samples were collected at a rate in compliance with ADEC guidelines. Analytical samples were collected from the locations of the highest PID field screen results to identify any contaminated soils remaining in place on the Subject Property. Site work occurred as specified in the *Everts Air Fuel, Inc. Corrective Action Work Plan Fairbanks, Alaska* dated October 5, 2021 v2.

Specific items included in the scope of work included the following:

- Preparation of the Corrective Action Work Plan;
- Discrete analytical soil sample collection, field screening of soil, and analysis of analytical samples performed by a ADEC certified laboratory;
- Documentation of site activities to include field notes site measurements, and photograph collection; and
- Preparation of the Post-Underliner Characterization Report.

### 1.2 Project Organization / Personnel

Everts Air Fuel, Inc., was the responsible party for the site. Everts Air Fuel staff provided access to the locked storage yard where the stockpile had previously been maintained. The mailing address for Everts Air Fuel is 5525 Airport Industrial Road, Fairbanks, AK 99709. The telephone number for Everts Air Fuel is (907) 450-2375.

SGS North America, Inc., performed laboratory analysis for soil analytical samples. SGS Anchorage performed all analysis for this project. SGS is approved by Alaska Department of Environmental Conservation (ADEC) to provide testing of soil for hazardous substances and petroleum related contaminants. The mailing address for SGS is 200 W Potter Dr, Anchorage, AK 99518. The telephone number for Eurofins TestAmerica is (907) 562-2343.

The investigation was conducted on October 6, 2021, by ARES on behalf of Everts Air Fuel. ARES staff on the project included Mr. Dustin Stahl, Mr. Josh Klynstra, and Mr. Tyler Teunissen. ARES staff members performing the field work have the ‘Qualified Environmental Professional’ or ‘Qualified Sampler’ designation by the Alaska Department of Environmental Conservation (ADEC) under 18 AAC 78. Mr. Dustin Stahl served as Project Manager for the project. The mailing address for Alaska Resources & Environmental Services, LLC, is P.O. Box 83050 Fairbanks, Alaska 99708. The telephone number for Mr. Stahl is (907) 374-3226. In summary Everts Air Fuel, Inc., staff performed the following activities:

- Provided project management, oversight, and site access.

In summary SGS North America, Inc., performed the following activities:

- Conducted laboratory analysis of discrete soil samples. SGS Anchorage analyzed soils for gasoline range organics (GRO) by method AK 101, diesel range organics (DRO) by AK102, volatile organic compounds (VOCs) by method EPA 8260D, 1,2-Dibromoethane (EDB) by 8260D SIM, lead by 6020A, and polycyclic aromatic hydrocarbons (PAH) by method EPA 8270D SIM. Laboratory quality control and quality assurance was also completed.

In summary ARES staff performed the following activities:

- Prepared the workplan for the subject property;
- Performed Post-Underliner Characterization at the subject property;
- Obtained field measurements to include site plan, PID field screening measurements, and sample locations. Documented site activities;
- Collection of soil field screen and soil analytical samples; and
- Preparation of the Final Report.

These activities are intended to satisfy requirements listed in 18 AAC 75 for site characterization requirements.

### 1.3 Regulatory Framework

A regulatory framework for the site assessment activity has been developed with the consideration of the following regulations and guidance:

- 18 AAC 75 *Oil and Other Hazardous Substances Pollution Control*, as amended through November 18, 2021;
- 18 AAC 78 *Underground Storage Tanks* as amended through Sept 29, 2019;
- ADEC *UST Procedures Manual* as amended through March 22, 2017;
- Site characterization requirements are provided by ADEC in 18 AAC 75, Articles 3 and 9 *Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances and General Provisions* as amended through November 18, 2021;
- ADEC soil cleanup levels in accordance with 18 AAC 75.341 Table B1 and B2, Method Two, ‘under 40” zone’, most stringent level listed November 18, 2021; and
- *ADEC Field Sampling Guidance* as amended through October, 2019.

## 2.0 SITE DESCRIPTION

### 2.1 Location

Everts Air Fuel storage yard is located at 5472 Mail Trail Road Fairbanks, Alaska. The property consists of a 6.62-acre parcel used primarily for the storage of materials and equipment used to support the Everts Air Fuel operation.

Legal description (5472 Mail Trail Road): Tax Lot 2320, Section 23, T-1S-R2W.

The Everts Air Fuel storage yard is located approximately 0.22 northwest of Airport Industrial Road, and approximately 712 feet east of the closest bend of the Chena River. The ground surface at the facility is 433 feet above the sea level. The subject property is located in the U.S. Geological Survey (USGS) Fairbanks D-2 quadrangle. See Figures 1-4, Appendix A

The GPS location of the former stockpiles is as follows:

Latitude: 64° 48' 54" N;

Longitude: -147° 53' 0.6" W

### 2.2 History

Per ADEC correspondence dated 8/13/21, the site history is as follows:

During October 1994, 340 cubic yards (CY) of contaminated soil from the FIA - Everts Air Fuel, Blk 3, Lot 11 site and 50 CY of contaminated soil from the FIA - Everts Air Fuel, Blk 3, Lot 1 were transported from the former FAI lease lots to the private 5472 Mail Trail property. This lot is also known as the SRC Partnership Property and the Arco lot. A plastic lined and covered stockpile of approximately 390 CY was created.

An additional 70 cubic yards of contaminated soil were excavated from the FIA - Everts Air Fuel, Blk 3, Lot 11 site in August 2008 and transported to the 5472 Mail Trail property and placed into another lined and covered stockpile.

Soil samples were collected from the stockpiles during three sampling events by Alaska Resources and Environmental Services (ARES) between 2010 and 2012. Analytical results for testing that included diesel range organics (DRO), benzene, ethylbenzene, toluene and xylene (BTEX) were provided to the ADEC in June 2021. Additional information including field screening results and field notes were requested, however these cannot be found and are presumed lost. ARES indicated that the sampling effort was to characterize contaminant levels remaining in the stockpiles. All results were below human health cleanup levels. Results from the north pile were all less than migration to groundwater cleanup levels. DRO ranged from 29.9 to 55.7 mg/kg with no BTEX above detection levels. DRO results from the south pile ranged from 44.1 to 355 mg/kg, with at least one result above the migration to groundwater cleanup level each year.

The soil stockpiles were removed between 2012 and 2016, apparently due to miscommunication between ARES and Everts staff. The location of the soil and the Everts staff responsible for moving the soil is not known.

## **Topography**

The United States Geological Survey (USGS) Fairbanks Quadrangle (D-2) provides topographic map coverage of the site. Fairbanks is located in the northern part of the Tanana Basin, which is a relatively flat floodplain of the Tanana River. The Subject Property is situated approximately 1.55 miles north of the Tanana River and approximately 712' east of the Chena River.

## **Regional Hydrology**

The Chena and Tanana rivers are the dominant influence on ground-water flow in the subject area. Two discharge peaks characterize the Chena River: spring snowmelt runoff and late summer precipitation. The stage of Chena River typically rises and falls in response to stage changes of the Tanana River. The depth to groundwater varies in response to these controlling factors. Based on historical groundwater data, the regional groundwater flow direction is generally to the west-northwest. However, the direction of the flow can vary slightly depending on the stage of the Chena River and Tanana River. The groundwater gradient in the area is relatively flat. Depth to groundwater in the area is generally 10-16 feet bgs, though seasonal fluctuation can range between 8-17 feet bgs

## **3.0 SITE CHARACTERIZATION**

### **3.1 Field Observations**

#### **October 6, 2021**

At 0930 ARES personnel Dustin Stahl (QEP) and Tyler Teunissen (QES), conducted an initial field site visit, collected field measurements, and laid out the sampling grid to prepare the site for field screen sample collection.

Josh Klynstra (QEP), arrived on site at 1045 to replace Dustin Stahl. The source area being investigated was a post underliner area where three (3) former long term contaminated soil stockpiles were placed on a non-permeable plastic liners. The last analytical samples collected from the stockpiles indicated that contamination remained in the stockpile soil above ADEC migration to groundwater CULs. The stockpiles were moved offsite without ADEC approval. The date of transport and the disposal location are not known.

Prior to soil FS sample collection, field screen sample locations were laid out according to the grid shown in Figure 4 of the ADEC approved work plan. The grid is also displayed in Figure 4, Appendix A of this report. In accordance with the approved workplan, field screen samples were collected at three depths (surface, 6" bgs, and 12" bgs) from each grid location.

Soils were excavated using a hand tools and/or a gasoline powered hand auger. Since all soils were frozen, the equipment only required dry decontamination methods between each sample location. Following the initial removal of soils, analytical samples were collected with disposable stainless steel spoons. Soils that had contacted reusable equipment were scraped away with the stainless steel spoons prior to analytical sample collection.

### 3.2 Field Screen Sampling

Eighty-seven (87) soil field screen samples were collected during the investigation. ARES used a MiniRAE Lite PID. The PID was used for headspace screening of soil samples according to ADEC field screening procedures. The PIDs were calibrated prior to each period of use to 0 parts per million (ppm) free air and 100 ppm isobutylene calibration gas.

Headspace screening was conducted as follows: Soil samples were transferred directly into a Ziploc-type bag. Each bag was filled one-third to one half full, then warmed for 15 to 20 minutes. Temperatures of the soil in the bag were warmed to at least 16 °C (60 °F). Samples were agitated at the beginning and end of the warming period inside the bag to enhance volatilization. The bags were partially opened after the warming and the VOCs in the headspace above the soil were sampled by inserting the PID probe. The highest meter reading obtained was recorded.

Field screen samples were collected and used to guide the excavation efforts for determination of the best locations for collection of soil samples for laboratory analysis. Since all PID readings were less than 0.2 ppm, a random selection of sampling locations was selected by the personnel on site. Field screen results are displayed in Table 1. Final field screen sample locations are shown in Figure 3.

**Table 1: Field Screen Measurements Summary**

PID Field Screening Results							
Sample ID (Flag #)	Date Collected	Sample Results (ppm)	Depth (feet)	Sample ID (Flag #)	Date Collected	Sample Results (ppm)	Depth (feet)
1.1	10-06-2021	0.0	0.0	15.3	10-06-2021	0.0	1.0
1.2	10-06-2021	0.0	0.5	16.1	10-06-2021	0.0	0.0
1.3	10-06-2021	0.0	1.0	16.2	10-06-2021	0.0	0.5
2.1	10-06-2021	0.0	0.0	16.3	10-06-2021	0.0	1.0
2.2	10-06-2021	0.0	0.5	17.1	10-06-2021	0.0	0.0
2.3	10-06-2021	0.0	1.0	17.2	10-06-2021	0.0	0.5
3.1	10-06-2021	0.0	0.0	17.3	10-06-2021	0.0	1.0
3.2	10-06-2021	0.0	0.5	18.1	10-06-2021	0.0	0.0
3.3	10-06-2021	0.0	1.0	18.2	10-06-2021	0.0	0.5
4.1	10-06-2021	0.0	0.0	18.3	10-06-2021	0.0	1.0
4.2	10-06-2021	0.0	0.5	19.	10-06-2021	0.0	0.0
4.3	10-06-2021	0.0	1.0	19.2	10-06-2021	0.0	0.5
5.1	10-06-2021	0.0	0.0	19.3	10-06-2021	0.0	1.0
5.2	10-06-2021	0.1	0.5	20.1	10-06-2021	0.0	0.0
5.3	10-06-2021	0.0	1.0	20.2	10-06-2021	0.0	0.5

6.1	10-06-2021	0.0	0.0	20.3	10-06-2021	0.0	1.0
6.2	10-06-2021	0.1	0.5	21.1	10-06-2021	0.0	0.0
6.3	10-06-2021	0.0	1.0	21.2	10-06-2021	0.0	0.5
7.1	10-06-2021	0.0	0.0	21.3	10-06-2021	0.0	1.0
7.2	10-06-2021	0.0	0.5	22.1	10-06-2021	0.0	0.0
7.3	10-06-2021	0.0	1.0	22.2	10-06-2021	0.0	0.5
8.1	10-06-2021	0.0	0.0	22.3	10-06-2021	0.0	1.0
8.2	10-06-2021	0.0	0.5	23.1	10-06-2021	0.0	0.0
8.3	10-06-2021	0.0	1.0	23.2	10-06-2021	0.0	0.5
9.1	10-06-2021	0.1	0.0	23.3	10-06-2021	0.0	1.0
9.2	10-06-2021	0.0	0.5	24.1	10-06-2021	0.0	0.0
9.3	10-06-2021	0.0	1.0	24.2	10-06-2021	0.0	0.5
10.1	10-06-2021	0.0	0.0	24.3	10-06-2021	0.0	1.0
10.2	10-06-2021	0.0	0.5	25.1	10-06-2021	0.0	0.0
10.3	10-06-2021	0.0	1.0	25.2	10-06-2021	0.0	0.5
11.1	10-06-2021	0.0	0.0	25.3	10-06-2021	0.0	1.0
11.2	10-06-2021	0.0	0.5	26.1	10-06-2021	0.0	0.0
11.3	10-06-2021	0.0	1.0	26.2	10-06-2021	0.0	0.5
12.1	10-06-2021	0.0	0.0	26.3	10-06-2021	0.0	1.0
12.2	10-06-2021	0.0	0.5	27.1	10-06-2021	0.0	0.0
12.3	10-06-2021	0.0	1.0	27.2	10-06-2021	0.0	0.5
13.1	10-06-2021	0.0	0.0	27.3	10-06-2021	0.0	1.0
13.2	10-06-2021	0.0	0.5	28.1	10-06-2021	0.0	0.0
13.3	10-06-2021	0.0	1.0	28.2	10-06-2021	0.0	0.5
14.1	10-06-2021	0.2	0.0	28.3	10-06-2021	0.0	1.0
14.2	10-06-2021	0.0	0.5	29.1	10-06-2021	0.0	0.0
14.3	10-06-2021	0.0	1.0	29.2	10-06-2021	0.0	0.5
15.1	10-06-2021	0.0	0.0	29.3	10-06-2021	0.0	1.0
15.2	10-06-2021	0.0	0.5				

Samples results greater than 20 ppm are **highlighted and bold**.

### 3.3 Analytical Sampling

A total of ten (10) soil samples (including one blind field duplicate sample for QA/QC purposes) were collected from the underliner area to confirm final site conditions. Samples were collected from all three depths throughout the sample area.

Soil samples consisted of grab samples. All samples were analyzed for VOC by method 8260D, GRO by method AK101, EDB by method 8260D SIM, DRO by method AK102 and Lead by method 6020A. Samples 21-MTR-1 and MTR-02 were also analyzed for PAH by method EPA 8270E SIM.

### Sampling Methodology

Since all PID readings were less than 0.2 ppm, a random selection of analytical sampling locations was selected by the personnel on site. Soil sample locations collected for laboratory analysis are shown in Figure 3. Soil analytical results are summarized below in Tables 2-4.

Analytical samples were placed into certified clean glass jars provided by SGS. Samples were handled using disposable Nitrile gloves. To comply with the *UST Procedures Manual* for VOC samples, 25 milliliters of a surrogate methanol was carefully added to the undisturbed soil in the partially filled pre-weighted sample jar so that the sample was completely submerged. Analytical samples were collected in order of decreasing volatility.

Sample jars were properly labeled and placed into a pre-chilled cooler. The chilled temperature within the cooler was maintained at approximately 4°C using frozen gel packages during transportation to the laboratory. A signed Chain-of-Custody (COC) form accompanied the samples to SGS. The COC is attached to the SGS analytical report. An analytical results summary table showing all analytical results is included in Appendix C. The complete SGS Laboratory Report and ADEC Laboratory Checklist are included in Appendix E.

### 3.4 ADEC Target Cleanup Levels

Target soil cleanup levels for the petroleum-contaminated spill site were determined using 18 AAC 75.341 (Method Two) Soil Cleanup Levels (Table B1, B2), Under 40" zone, most stringent cleanup level listed (Human Health and migration to groundwater).

Applicable ADEC target cleanup levels are listed below in Tables 2-3 and in Appendix C.

### 3.5 Soil Analytical Results

Analytical results for analytes detected in the soil samples collected from the post-underliner area are summarized in Tables 2-3 below. Analytical sample locations are shown in Figure 4. An analytical results summary table showing all analytical results is included in Appendix C. The complete SGS Laboratory Report and ADEC Laboratory Checklist are included in Appendix E..

**Table 2: Summary of Detected Analytical Results in Soil (except PAH)**

Sample ID	Date	Depth in inches bgs	Method 8260D			AK 101	AK 102
			P & M - Xylene in mg/kg	Tetrachloroethene in mg/kg	Trichlorofluoromethane in mg/kg	GRO in mg/kg	DRO in mg/kg
21-MTR-01	10/6/21	6	ND [0.0326]	ND [0.00815]	ND [0.0326]	ND [1.63]	<b>16.4 J</b>
21-MTR-02 (Duplicate of 21-MTR-01)	10/6/21	6	ND [0.0342]	ND [0.00855]	ND [0.0342]	ND [1.71]	<b>13.8 J</b>
21-MTR-03	10/6/21	0	ND [0.0346]	ND [0.00865]	<b>10.4 QN</b>	ND [1.73]	<b>42.6</b>
21-MTR-04	10/6/21	12	ND [0.0343]	ND [0.00855]	<b>0.0343 J QN</b>	ND [1.72]	<b>26.7</b>
21-MTR-05	10/6/21	0	ND [0.0396]	ND [0.00990]	ND [0.0396]	ND [1.98]	ND [11.9]
21-MTR-06	10/6/21	0	ND [0.0379]	ND [0.00945]	ND [0.0379]	ND [1.89]	<b>21.4</b>
21-MTR-07	10/6/21	12	ND [0.0350]	ND [0.00875]	ND [0.0350]	ND [1.76]	<b>13.3 J</b>
21-MTR-08	10/6/21	6	<b>0.0215 J</b>	<b>0.0111 J</b>	<b>0.136</b>	ND [1.74]	<b>20.5 J</b>
21-MTR-09	10/6/21	12	ND [0.0330]	ND [0.00825]	ND [0.0330]	ND [1.65]	<b>19.5 J</b>
21-MTR-10	10/6/21	0	ND [0.0345]	ND [0.00860]	<b>0.0355 J</b>	ND [1.73]	ND [11.3]
ADEC Cleanup Level <sup>1</sup>			<b>1.5</b>	<b>0.19</b>	<b>41</b>	<b>300</b>	<b>250</b>

<sup>1</sup> Title 18 of the Alaska Administrative Code, Chapter 75. Section 341. Table B1, B2 Method 2. Most stringent level listed for under 40" zone. Revised as of November 18, 2021

J= Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QN= Result is an estimate with unknown bias due to quality control failure.

Results above ADEC Regulatory Limit are highlighted and in **Bold**

Detected results are listed in **Bold**

ND= Not detected above the MRL.

Analytical results shown in Table 2 above display the only detected result for analytes in method 8260D. The full 8260D suite of VOC analytes are reported in the Analytical Results Summary table included in Appendix C.

**Table 3: Summary of PAH Analytical Results [EPA8270D SIM] in Soil**

Compound	21-MTR-01 in mg/kg	21-MTR-02 <sup>2</sup> in mg/kg	ADEC Cleanup Level <sup>1</sup> in mg/kg
Acenaphthene	ND [0.0135]	ND [0.0138]	37
Acenaphthylene	ND [0.0135]	ND [0.0138]	18
Anthracene	ND [0.0135]	ND [0.0138]	390
Benzo (a) anthracene	<b>0.0109 [0.0135] J</b>	<b>0.00879 [0.0138] J</b>	0.7
Benzo (a) pyrene	<b>0.0162 [0.0135] J</b>	<b>0.0137 [0.0138] J</b>	1.9
Benzo (b) fluoranthene	<b>0.0228 [0.0135] J</b>	<b>0.0197 [0.0138] J</b>	20
Benzo (ghi) perylene	<b>0.0157 [0.0135] J</b>	<b>0.0119 [0.0138] J</b>	15000
Benzo (k) fluoranthene	<b>0.0084 [0.0135] J</b>	<b>0.00759 [0.0138] J</b>	190
Chrysene	<b>0.0179 [0.0135] J</b>	<b>0.0159 [0.0138] J</b>	600
Dibenzo (a,h) anthracene	ND [0.0135]	ND [0.0138]	1.5
Fluoranthene	<b>0.0252 [0.0135] J</b> QN	<b>0.0187 [0.0138] J</b> QN	590
Fluorene	ND [0.0135]	ND [0.0138]	36
Indeno (1,2,3-cd) pyrene	<b>0.0113 [0.0135] J</b>	<b>0.00917 [0.0138] J</b>	15
Naphthalene	ND [0.0108]	ND [0.0111]	0.038
Phenanthrene	<b>0.0108 [0.0135] J</b> QN	<b>0.00900 [0.0138] J</b> QN	39
Pyrene	<b>0.0219 [0.0135] J</b>	<b>0.0172 [0.0138] J</b>	87
1-Methylnaphthalene	ND [0.0135]	ND [0.0138]	0.41
2-Methylnaphthalene	ND [0.0135]	ND [0.0138]	1.3
Sample Depth (in ft bgs)	0.5	0.5	

<sup>1</sup> Title 18 of the Alaska Administrative Code, Chapter 75. Section 341. Table B1, B2 Method 2. Most stringent level listed for under 40" zone. Revised as of November 18, 2021

J= Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QN= Result is an estimate with unknown bias due to quality control failure.

Results above ADEC Regulatory Limit in **Highlighted and in Bold**.

Detected results in **Bold**.

ND= Not detected above the MRL.

<sup>2</sup>=Blind field duplicate sample to 21-MTR-01

Analytical results indicate that the soils collected from the post underliner area are below ADEC CULs for all tested analytes. DRO, Tetrachloroethene, Xylenes, Trichlorofluoromethane, and several PAH compounds were all detected at concentrations significantly below ADEC CULs. Due to the property's use as a storage yard for various vehicles and machinery and that there are no pre-stockpile underliner samples available for comparison it cannot be determined if the detected analytes are associated with the former stockpile or are historical in nature. All soils remaining in place in the post underliner area are significantly below ADEC CULs and no further action is recommended or warranted.

## **4.0 CHEMICAL DATA QUALITY REVIEW**

### **4.1 Introduction**

The ADEC Technical Memorandum Minimum Quality Assurance Requirements for Sample Handling, Reports, and Laboratory Data (October 22, 2019) and United States Environmental Protection Agency (EPA) National Functional Guidelines for Organic Review (EPA 2017) were followed in this site investigation. The data was reviewed to determine the data quality and to evaluate potential impact on the usability of the data. The review was performed using Level II reports that were provided by SGS laboratory of Anchorage, AK. The analytical laboratory reports, chain-of-custody records, and ADEC Lab Quality Checklists are included in Appendix E.

The following quality control parameters were reviewed:

- Test Methods
- Holding times
- Sample handling and receiving
- Chain of custody and shipping documents
- Surrogate percent recovery
- Field duplicate sample comparability
- Equipment blanks
- Trip blanks
- Method blanks
- Laboratory control sample (LCS)/Laboratory control sample duplicate (LCSD) percent recoveries and RPD
- Method Sensitivity – reporting limits and practical quantitation limits (PQL)

### **4.2 Analytical Laboratory and Test Methods**

All analytical analysis for this project were performed by SGS NorthAmerica at their Anchorage, AK laboratory. SGS NorthAmerica is approved by ADEC and DOD for the test methods listed below. SGS performed soil analysis for the following analytes and methods:

- VOCs- EPA 8260D
- GRO- AK101
- EDB- EPA 8260D SIM
- DRO- AK102

- Lead- 6020A
- PAH- EPA 8270E SIM

Only one (1) analytical sampling event occurred during the project. The analytical laboratory report for this project is 1216690.

### **4.3 Data Review Process**

The ADEC Technical Memorandum Minimum Quality Assurance Requirements for Sample Handling, Reports, and Laboratory Data (October 22, 2019) and United States Environmental Protection Agency (EPA) National Functional Guidelines for Organic Review (EPA 2017) were used as guidance throughout the data quality review. An ADEC Laboratory Data Review Checklist was completed and laboratory discrepancies and QC errors were noted in the Chemical Data Quality Review section of the final report. The data was reviewed to determine the data quality and to evaluate potential impact on the usability of the data. Analytical results with data quality and or usability affected by QC errors have been qualified with data flags in the analytical summary table included in Appendix C.

#### **4.3.1 Data Validation**

In order for data to be used for decision making purposes it is essential that it be of known and documented quality. Validation of data requires that appropriate QA/QC procedures be followed and that adequate documentation be included for all laboratory-generated analytical data. The QA/QC documentation provided by the laboratory in conjunction with sample results allows for the evaluation of the following indicators of data quality:

- Integrity and stability of samples;
- Instrument performance during sample analysis;
- Possibility of sample contamination;
- Identification and quantitation of analytes ;
- Analytical precision; and
- Analytical accuracy

The laboratory has conducted QA/QC checks in accordance with ADEC, project, and lab specific requirements and provided documentation of these checks in the following sections of the provided Level II report:

- Case Narrative
- Chain of Custody documentation
- Sample receipt documentation
- Summary of results
- Summary of QC results and
- Raw Data

These sections of the laboratory report were reviewed and an ADEC Laboratory Checklist was completed in order to identify potential data quality issues. The quality control parameters were found to be within accepted limits with the following exceptions listed in Sections 4.4-4.7 below.

All QA/QC errors identified during data validation were reviewed to determine the impact on data quality and data usability. These effects on data quality and usability of the data are discussed in Sections 4.4-4.7 below.

#### 4.4 Sample Handling and Chain of Custody

**1216690:** Ten (10) discrete soil samples were received on 10/08/2021 0930 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt at SGS Fairbanks was 4.8° C. The temperature of the cooler upon receipt in Anchorage was 1.6° C.

The COC information was completed properly, signed, and dated. There were no discrepancies related to the COC or sample receipt.

#### 4.5 Holding Time Compliance

All samples were analyzed withing the required holding times without exception.

#### 4.6 Field Quality Assurance/ Quality Control

##### 4.6.1 Correlation of Field Screen Samples vs. Analytical Results

PID heated headspace soil field screen results were compared to analytical results to verify the quality of field screen sample results.

**Table 4: Field Screen Sample and Analytical Sample Correlation**

Field Screen #	Results (ppm)	Sample ID	GRO Sample Results (mg/kg)	DRO Sample Results (mg/kg)
6.2	0.1	21-MTR-01	ND [1.63]	<b>16.4 J</b>
6.2	0.1	21-MTR-02 (Duplicate of 21-MTR-01)	ND [1.71]	<b>13.8 J</b>
2.1	0.0	21-MTR-03	ND [1.73]	<b>42.6</b>
4.3	0.0	21-MTR-04	ND [1.72]	<b>26.7</b>
9.1	0.1	21-MTR-05	ND [1.98]	ND [11.9]
13.1	0.0	21-MTR-06	ND [1.89]	<b>21.4</b>
15.3	0.0	21-MTR-07	ND [1.76]	<b>13.3 J</b>
19.2	0.0	21-MTR-08	ND [1.74]	<b>20.5 J</b>
24.3	0.0	21-MTR-09	ND [1.65]	<b>19.5 J</b>
27.1	0.0	21-MTR-10	ND [1.73]	ND [11.3]

J= The reported concentration exceeds the DL but is less than the LOQ and is considered and estimated result

Tabulated Data is focused on GRO and DRO analytical data as being the most meaningful to this study. Several VOC analytes follow same corresponding trend including 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, Isopropylbenzene, m-Xylene & p-Xylene, Naphthalene, N-Propylbenzene, o-Xylene and Total Xylenes.

Detected results in **Bold**.

In general, lower PID field screen sample results are expected to correspond with lower GRO/DRO analytical results and higher PID field screen sample results are expected to correspond with higher GRO/DRO analytical results. DRO was detected in several of the

samples at concentrations ranging from 13.3 mg/kg to 42.6 mg/kg, but it is assumed that this is highly weathered DRO. Aged DRO at these concentrations will typically not produce significant PID readings. The PID field screening results match the expectations of the instrument for the analytes that were detected. Since all field screen results were 0.1 ppm, or less, there is no trend to be correlated.

#### 4.6.2 Equipment Blanks

Equipment blanks were not required for this project. All samples were collected with dedicated disposable sampling supplies.

#### 4.6.3 Field Duplicate Samples

Field quality control (QC) procedures for this project included the collection and analysis of one (1) soil blind field duplicate sample. The blind field duplicate sample was collected for each matrix and analytical method, then analyzed for the same analytes as the original sample. The QC sample was analyzed to assess the quality of sample collection and handling, as well as the accuracy and precision of the laboratory's analytical procedures.

RPD calculations provide a comparison of two theoretically identical samples that are submitted blind to the laboratory in order to provide an un-biased measure of precision. Due to the nature of the RPD calculation, sample data for both samples must be reported in order for the RPD calculation to provide meaningful data. The RPDs are shown in Table 5 below for all analytes with calculable RPDs. RPD calculations were not possible for analytes with non-detect values for both of the samples.

**Table 5: Relative Percent Difference Calculations for Soil**

Sample ID / Duplicate ID	Compound in Soil	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD (%)
21-MTR-01 / 21-MTR-02	Diesel Range Organics	16.4 [10.95] J	13.8 [11.1] J	17.2
	Lead	19.2 [1.04]	24.1 [1.035]	22.6
	Benzo(a)Anthracene	0.0109 [0.0135] J	0.00879 [0.0138] J	21.4
	Benzo[a]pyrene	0.0162 [0.0135] J	0.0137 [0.0138] J	16.7
	Benzo[b]Fluoranthene	0.0228 [0.0135] J	0.0197 [0.0138] J	14.6
	Benzo[g,h,i]perylene	0.0157 [0.0135] J	0.0119 [0.0138] J	27.5
	Benzo[k]fluoranthene	0.0084 [0.0135] J	0.00759 [0.0138] J	10.1
	Chrysene	0.0179 [0.0135] J	0.0159 [0.0138] J	11.8
	Fluoranthene	0.0252 [0.0135] J	0.0187 [0.0138] J	29.6
	Indeno[1,2,3-c,d] pyrene	0.0113 [0.0135] J	0.00917 [0.0138] J	20.8
	Phenanthrene	0.0108 [0.0135] J	0.00900 [0.0138] J	18.2
	Pyrene	0.0219 [0.0135] J	0.0172 [0.0138] J	24

Given two sample concentrations (X and Y) the formula to determine RPD is the absolute value of the following:

$$[ ((X - Y) / (X + Y) / 2 ) * 100 = \text{RPD}$$

Calculated RPD values above ADEC limits of 50% in soil are **Bold**.

J= The reported concentration exceeds the DL but is less than the LOQ and is considered and estimated result

The ADEC recommended limit for RPD is 50% in soil. All of the calculated RPDs fell within the acceptable range for this project.

Data quality is unaffected for samples/analytes other than those listed above.

#### 4.6.4 Trip Blank Samples

Field quality control (QC) procedures for this project included the analysis of one (1) soil trip blank sample which accompanied the samples in the field. The trip blank sample was analyzed to assess the quality of sample collection and handling.

In ideal conditions the analysis of a trip blank sample should not indicate the presence of any of the tested analytes in a quantity above the method reporting limit (MRL). A result above the MRL can indicate that cross-contamination occurred between samples during sample transport or analysis, or indicate laboratory contamination.

The soil trip blank sample was analyzed for GRO by method AK 101, EDB by method 8260D SIM and VOC by method 8260D. All results for the trip blank were reported as non-detects and there is no effect to the data.

#### 4.7 Laboratory Quality Assurance / Quality Control

##### 4.7.1 Detection Limits

All reported LOQs for the project were less than the ADEC CUL with the following exceptions listed below.

**1216690:** 1,2,3-Trichloropropane, 1,2-Dibromoethane and Dibromochloromethane have detection limits that exceed ADEC CL's in one or more samples.

Data quality is affected. Analytes with elevated detection limits could be present at concentrations that exceed ADEC cleanup levels. 1,2,3-Trichloropropane, 1,2-Dibromoethane and Dibromochloromethane were not detected in the original stockpile and are not contaminants of concern at the site. The data remains usable. Sample results with detection limits that exceed ADEC CUL's are highlighted in blue in the analytical summary table.

##### 4.7.2 Method Blanks

**1216690:** A method blank was reported for each method and all method blank results associated with this sampling event were non-detect. No data is affected.

##### 4.7.3 LCS/LCSD

**1216690:** All percent recoveries (%R) and relative percent differences (RPD) reported and within method or laboratory limits and project specified objectives.

##### 4.7.4 MS/ MSD

**1216690:** An MS/MSD was not submitted for this project. However, an MS/MSD was reported for methods 8260D, 8260D-SIM, 8270D-SIM and SW6020B.

For method 8260D, 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene in the MSD for batch VXX37996 exceeded recovery limits. Hexachlorobutadiene for the MS and MSD in batch

VXX38000 exceeded recovery limits. These analytes recovered high in the MS or MSD sample and the associated results were non-detect. Data quality and usability are not affected. Trichlorofluoromethane exceeded recovery limits for the MS in batch VXX38048. The associated detected results for Trichlorofluoromethane are flagged QN for MS/MSD recovery failures. The detected results are significantly below ADEC CULs and remain usable.

For method 8270D-SIM, Fluoranthene and Phenanthrene exceeded recovery limits for the MS in batch VXX45706. Phenanthrene recovered outside RPD limits in batch VXX45706. The following samples are affected by the recovery failure in batch VXX45706: 1216690001, 1216690002. The associated data is flagged QN for MS/MSD recovery failures. The detected results are significantly below ADEC CULs and remain usable.

#### 4.7.5 Surrogates

**1216690:** All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives. No data was affected.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

This report summarizes the findings of the post-underliner characterization conducted by Alaska Resources and Environmental Services, LLC (ARES) related to historical stockpiles of contaminated soil that were previously stockpiled on liners in the area of investigation. The investigation took place at the industrial lot referenced as Everts Air Fuel Inc. located at 5472 Mail Trail Road, Fairbanks, Alaska.

The purpose of this project was to perform a post-underliner characterization and determine if the site was impacted by the storage and subsequent removal of the former contaminated soil stockpiles at the subject site. Site work occurred as specified in the *Everts Air Fuel 5472 Mail Trail Road Corrective Action Work Plan* dated October 5, 2021 v2.

Analytical results indicate that the soils collected from the post underliner area are below ADEC CULs for all tested analytes. DRO, Tetrachloroethene, Xylenes, Trichlorofluoromethane, and several PAH compounds were all detected at concentrations significantly below ADEC CULs. Due to the property's use as a storage yard for various vehicles and machinery and that there are no pre-stockpile underliner samples available for comparison it cannot be determined if the detected analytes are associated with the former stockpile or are historical in nature. All soils remaining in place in the post underliner area are significantly below ADEC CULs and no further action is recommended or warranted.

ARES recommends the following actions:

- 1) ARES recommends that no further action should be required.

## 6.0 LIMITATIONS OF INVESTIGATION

This report presents the analytical results from a limited number of soil samples and should not be construed as a comprehensive study of subsurface conditions at the site. The samples were intended to evaluate the presence or absence of contaminants at the locations selected.

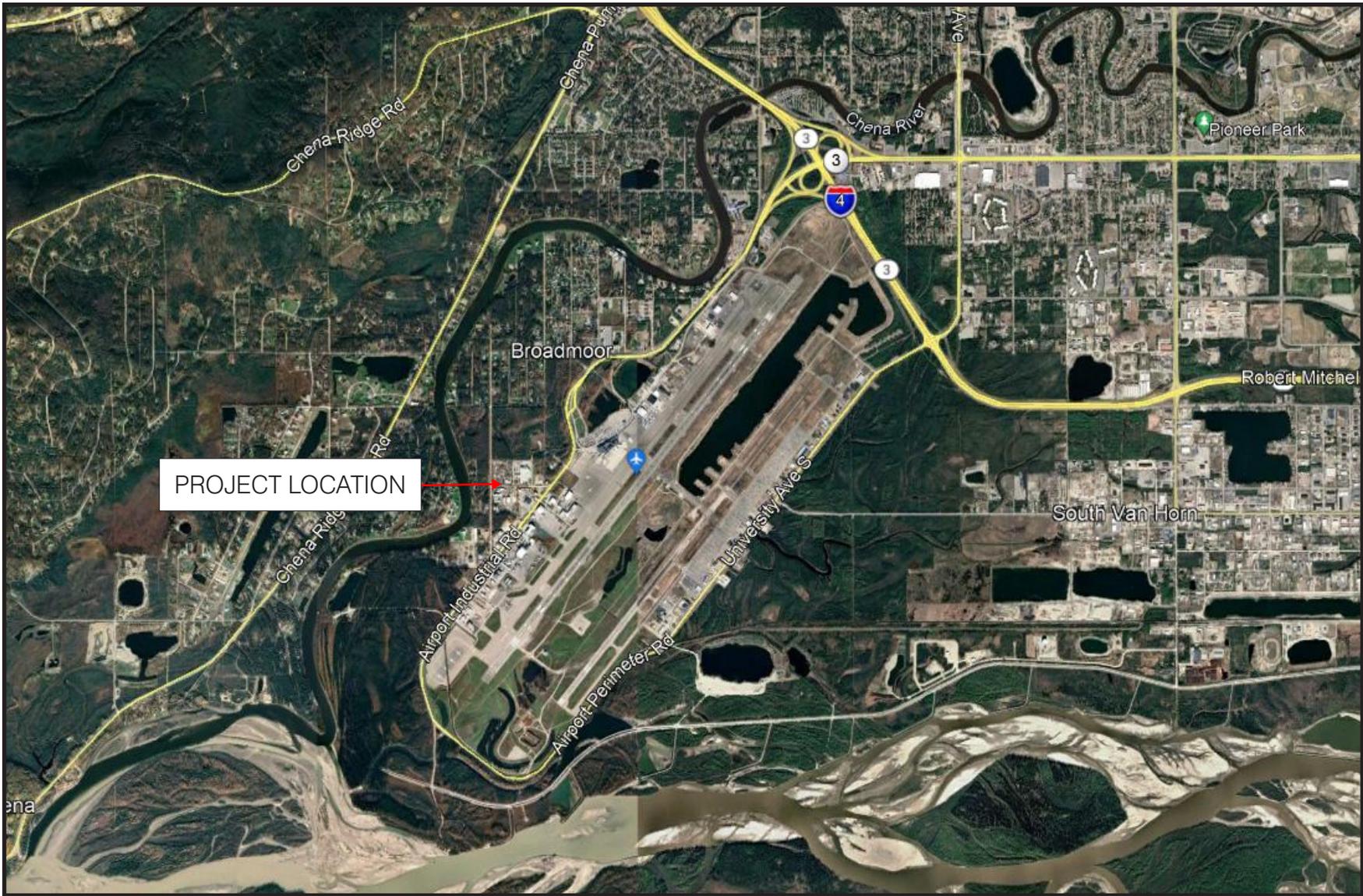
Detectable levels of petroleum hydrocarbons or other substances may be present at different locations. It was also not the intent of our sampling and testing to detect the presence of soil affected by contaminants other than those for which laboratory analysis were performed. No conclusions can be drawn on the presence or absence of other contaminants. This is not a geotechnical study.

The data presented in this report should be considered representative of the time of our site observations and sample collection. Changes in site conditions can occur with time because of natural forces or human activity. ARES reserves the right to modify or alter conclusions and recommendations should additional data become available.

This report was prepared for the exclusive use of Everts Air Fuel, Inc., and its representatives. If it is made available to others, it should be for information on factual data only and not as a warranty of subsurface conditions.

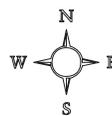
# **Appendix A:**

## **Figures**



**ALASKA RESOURCES AND ENVIRONMENTAL SERVICES, LLC**  
 PO BOX 83050  
 FAIRBANKS, AK 99708  
 PH. (907) 374-3226  
 FAX (907) 374-3219

PROJECT LOCATION  
 MAP



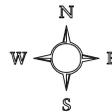
DATE: 9/29/21	PROJECT: EVERTS AIR FUEL STOCKPILE SAMPLING 2021
DRAWN: AHH	5472 MAIL TRAIL, FAIRBANKS, AK
SCALE IN MILES:	

**FIGURE**  
**1**



**ALASKA RESOURCES AND ENVIRONMENTAL SERVICES, LLC**  
 PO BOX 83050  
 FAIRBANKS, AK 99708  
 PH. (907) 374-3226  
 FAX (907) 374-3219

STOCKPILE LOCATION  
 MAP



DATE: 9/29/21

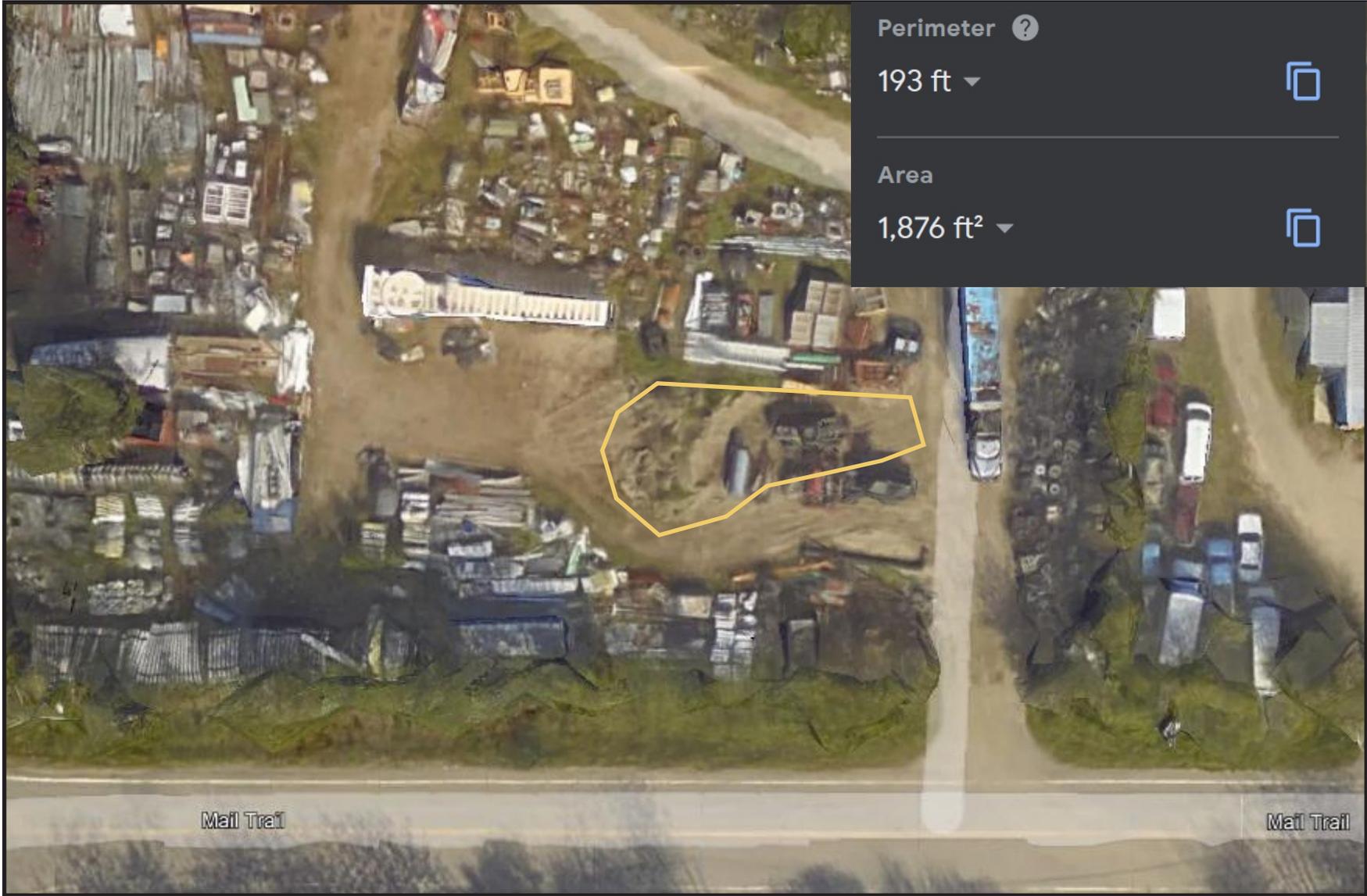
DRAWN: AHH

SCALE IN FEET:

PROJECT:  
 EVERTS AIR FUEL  
 STOCKPILE SAMPLING 2021  
 5472 MAIL TRAIL, FAIRBANKS, AK



**FIGURE**  
**2**



**ALASKA RESOURCES AND ENVIRONMENTAL SERVICES, LLC**  
 PO BOX 83050  
 FAIRBANKS, AK 99708  
 PH. (907) 374-3226  
 FAX (907) 374-3219

STOCKPILE AREA  
 CALCULATION MAP



DATE: 9/29/21

DRAWN: AHH

SCALE IN FEET:

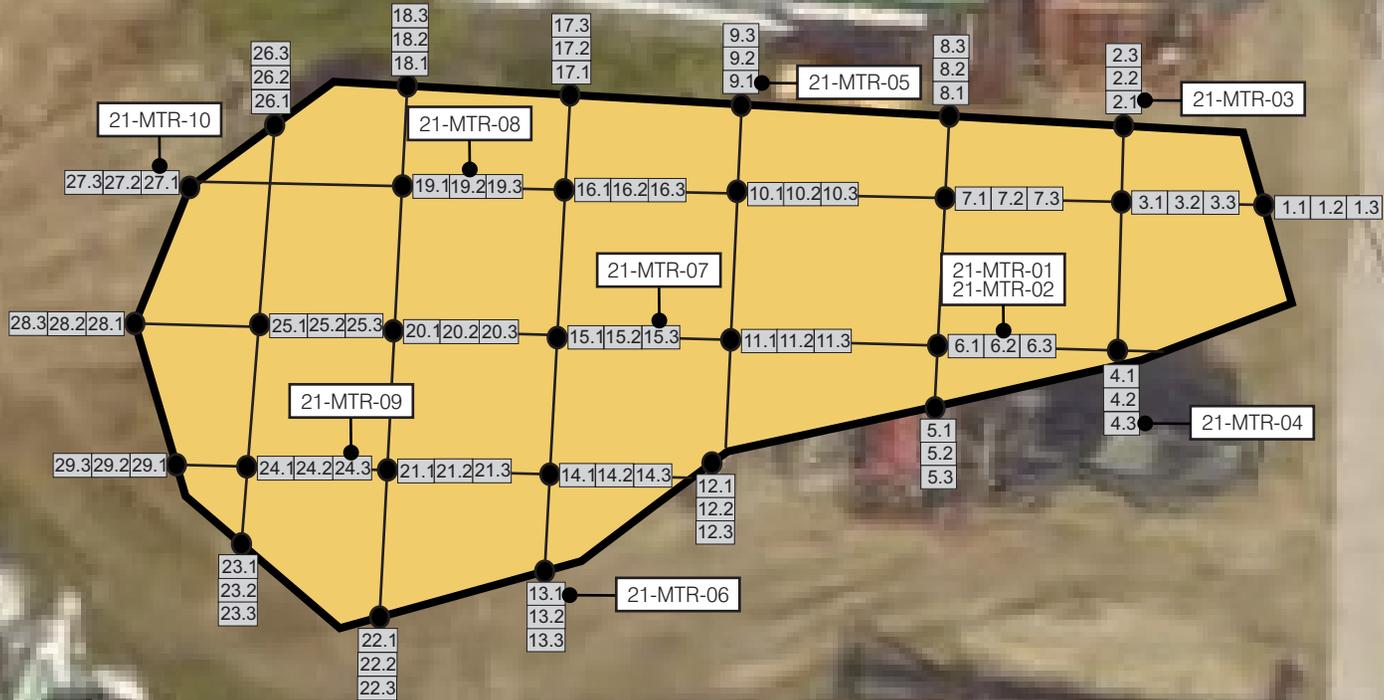
PROJECT:  
 EVERTS AIR FUEL  
 STOCKPILE SAMPLING 2021  
 5472 MAIL TRAIL, FAIRBANKS, AK



**FIGURE**  
**3**

**KEY**

- FIELD SCREEN LOCATION
- # FIELD SCREEN SOIL SAMPLE LOCATION WITH LEVELS BELOW 20 PPM
- ↓ ANALYTICAL SOIL SAMPLE LOCATION - ALL ANALYTES BELOW ADEC CULS

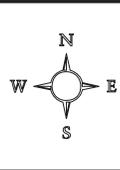


NOTE: FIELD SCREENS WERE COLLECTED AT 0", 6" AND 12" AT EACH LOCATION



**ALASKA RESOURCES AND ENVIRONMENTAL SERVICES, LLC**  
 PO BOX 83050  
 FAIRBANKS, AK 99708  
 PH. (907) 374-3226  
 FAX (907) 374-3219

UNDERLINER FIELD SCREEN & ANALYTICAL SAMPLE LOCATION MAP



DATE: 04/13/2022  
 DRAWN: RAR  
 SCALE IN FEET:

PROJECT:  
 EVERTS AIR FUEL STOCKPILE SAMPLING 2021  
 5472 MAIL TRAIL, FAIRBANKS, AK

**FIGURE 4**

**Appendix B:**  
**Photographs**



PHOTOGRAPH 1: VIEWED NORTHWEST- ARES STAFF LAYING OUT FIELD SCREEN SAMPLE GRID



PHOTOGRAPH 2: VIEWED WEST- ARES USING HAND TOOLS TO COLLECT SOIL FOR FIELD SCREENING



PHOTOGRAPH 3: VIEWED WEST- SAMPLE GRID OVERVIEW



PHOTOGRAPH 4: CLOSE UP VIEW OF FIELD SCREEN SAMPLE LOCATION



PHOTOGRAPH 5: VIEWED WEST- ARES STAFF COLLECTING SWING TIE MEASUREMENTS OF ANALYTICAL LOCATIONS



PHOTOGRAPH 6: CLOSE UP VIEW/ PHOTO DOCUMENTATION OF SWING TIE POINT INDICATED IN THE FIELD NOTES.

**POST UNDERLINER CHARACTERIZATION**  
5472 MAIL TRAIL ROAD, FAIRBANKS, AK

PHOTOGRAPHS 1-6

**Alaska Resources and  
Environmental Services, LLC**  
3520 International Street, AK 99701

PH. (907) 374-3226  
FAX (907) 374-3219



**Appendix C:**  
**Analytical Summary Table**

Method	Units	Analyte	ADEC Cleanup Level	Sample ID	21-MTR-01	21-MTR-02	21-MTR-03	21-MTR-04	21-MTR-05	21-MTR-06	21-MTR-07	21-MTR-08	21-MTR-09	21-MTR-10	Trip Blank 1	
				Location ID	10/6/2021 1:58 PM	10/6/2021 2:04 PM	10/6/2021 2:04 PM	10/6/2021 2:23 PM	10/6/2021 2:23 PM	10/6/2021 2:43 PM	12/16/2001 12:00 PM					
			Lab Sample ID	216690001	216690002	216690003	216690004	216690005	216690006	216690007	216690008	216690009	216690010	Trip Blank 1		
			Matrix	SOIL	Trip Blank 1											
			Analytical Results [LOD]													
AK101	mg/kg	Gasoline Range Organics	300	ND (1.63)	ND (1.71)	ND (1.73)	ND (1.72)	ND (1.96)	ND (1.89)	ND (1.76)	ND (1.74)	ND (1.65)	ND (1.73)	ND (1.25)		
AK102	mg/kg	Diesel Range Organics	250	16.4 (0.95) J	13.8 (1.1) J	42.6 (1.1) J	26.7 (1.1) J	ND (1.91)	21.4 (1.1) J	13.3 (1.1) J	19.5 (1.1) J	19.5 (1.1) J	11.1 (1.1) J			
SW6020B	mg/kg	Lead	NS	19.2 (1.04)	24.1 (1.05)	21.6 (1.05)	36.7 (1.12)	6.24 (1.175)	28.3 (1.0525)	19.7 (1.07)	15.5 (1.07)	24.6 (1.04)	6.66 (1.065)			
SW3260D-SIM	mg/kg	1,2-Dibromomethane	0.00024	ND (0.0000815)	ND (0.000085)	ND (0.0000865)	ND (0.000085)	ND (0.000099)	ND (0.0000945)	ND (0.0000875)	ND (0.0000865)	ND (0.0000825)	ND (0.0000860)	ND (0.0000625)		
K270D SIM (PAH)	mg/kg	1-Methylanthracene	0.41	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	2-Methylanthracene	1.3	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	Acenaphthylene	37	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	Acenaphthylene	18	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	Anthracene	390	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	Benzo(a)anthracene	0.7	0.0109 (0.0135) J	0.00879 (0.0138) J	0.0137 (0.0138) J	0.0137 (0.0138) J									
K270D SIM (PAH)	mg/kg	Benzo(a)anthracene	1.9	0.0162 (0.0135) J	0.0137 (0.0138) J	0.0137 (0.0138) J	0.0137 (0.0138) J									
K270D SIM (PAH)	mg/kg	Benzo(b)fluoranthene	20	0.0228 (0.0135) J	0.0197 (0.0138) J	0.0197 (0.0138) J	0.0197 (0.0138) J									
K270D SIM (PAH)	mg/kg	Benzo(k)fluoranthene	1500	0.0157 (0.0135) J	0.0119 (0.0138) J	0.0119 (0.0138) J	0.0119 (0.0138) J									
K270D SIM (PAH)	mg/kg	Benzo(g)fluoranthene	190	0.0084 (0.0135) J	0.00759 (0.0138) J	0.00759 (0.0138) J	0.00759 (0.0138) J									
K270D SIM (PAH)	mg/kg	Chrysene	600	0.0179 (0.0135) J	0.0159 (0.0138) J	0.0159 (0.0138) J	0.0159 (0.0138) J									
K270D SIM (PAH)	mg/kg	Dibenz(a,h)anthracene	1.5	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	Fluorene	590	0.0552 (0.0135) J QN	0.017 (0.0138) J QN	0.017 (0.0138) J QN	0.017 (0.0138) J QN									
K270D SIM (PAH)	mg/kg	Fluorene	36	ND (0.0135)	ND (0.0138)	ND (0.0138)	ND (0.0138)									
K270D SIM (PAH)	mg/kg	Indeno(1,2,3-cd)pyrene	15	0.0113 (0.0135) J	0.00917 (0.0138) J	0.00917 (0.0138) J	0.00917 (0.0138) J									
K270D SIM (PAH)	mg/kg	Naphthalene	0.038	ND (0.0108)	ND (0.0111)	ND (0.0111)	ND (0.0111)									
K270D SIM (PAH)	mg/kg	Phenanthrene	39	0.0108 (0.0135) J QN	0.00909 (0.0138) J QN	0.00909 (0.0138) J QN	0.00909 (0.0138) J QN									
K270D SIM (PAH)	mg/kg	Pyrene	87	0.0219 (0.0135) J	0.0172 (0.0138) J	0.0172 (0.0138) J	0.0172 (0.0138) J									
SW8000	mg/kg	1,1,2-Tetrachloroethane	0.022	ND (0.0131)	ND (0.0137)	ND (0.0139)	ND (0.0137)	ND (0.0159)	ND (0.0152)	ND (0.0140)	ND (0.0139)	ND (0.0132)	ND (0.0138)	ND (0.0100)		
SW8000	mg/kg	1,1,1-Trichloroethane	32	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,1,2,2-Tetrachloroethane	0.003	ND (0.00130)	ND (0.00137)	ND (0.00139)	ND (0.00137)	ND (0.00159)	ND (0.00152)	ND (0.00140)	ND (0.00139)	ND (0.00132)	ND (0.00138)	ND (0.00100)		
SW8000	mg/kg	1,1,2-Trichloroethane	0.0014	ND (0.00065)	ND (0.000685)	ND (0.000695)	ND (0.000685)	ND (0.000790)	ND (0.000755)	ND (0.000700)	ND (0.000695)	ND (0.000660)	ND (0.000690)	ND (0.000500)		
SW8000	mg/kg	1,1-Dichloroethane	0.092	ND (0.0061)	ND (0.0063)	ND (0.0063)	ND (0.0063)	ND (0.0075)	ND (0.0075)	ND (0.0070)	ND (0.00695)	ND (0.00660)	ND (0.00660)	ND (0.00500)		
SW8000	mg/kg	1,1-Dichloroethane	1.2	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,1-Dichloropropane	NS	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,2,3-Trichlorobenzene	0.15	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0070)	ND (0.0075)	ND (0.0070)	ND (0.00695)	ND (0.00660)	ND (0.00660)	ND (0.00500)		
SW8000	mg/kg	1,2,3-Trichlorobenzene	0.00001	ND (0.00001)												
SW8000	mg/kg	1,2,4-Trichlorobenzene	0.82	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,2,4-Trichlorobenzene	0.61	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0070)	ND (0.0075)	ND (0.0070)	ND (0.00695)	ND (0.00660)	ND (0.00660)	ND (0.00500)		
SW8000	mg/kg	1,2-Dibromo-3-chlorobenzene	NS	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0055)	ND (0.0070)	ND (0.0075)	ND (0.0070)	ND (0.00695)	ND (0.00660)	ND (0.00660)	ND (0.00500)		
SW8000	mg/kg	1,2-Dibromo-3-chlorobenzene	0.00024	ND (0.00090)	ND (0.00102)	ND (0.00102)	ND (0.00102)	ND (0.00119)	ND (0.000750)							
SW8000	mg/kg	1,2-Dichlorobenzene	2.4	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,2-Dichloroethane	0.055	ND (0.00130)	ND (0.00137)	ND (0.00139)	ND (0.00137)	ND (0.00159)	ND (0.00152)	ND (0.00140)	ND (0.00139)	ND (0.00132)	ND (0.00138)	ND (0.00100)		
SW8000	mg/kg	1,2-Dichloropropane	0.03	ND (0.0065)	ND (0.00685)	ND (0.00685)	ND (0.00685)	ND (0.00790)	ND (0.00755)	ND (0.00700)	ND (0.00695)	ND (0.00660)	ND (0.00660)	ND (0.00500)		
SW8000	mg/kg	1,3,5-Trimethylbenzene	0.66	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,3-Dichlorobenzene	2.3	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,3-Dichloropropane	NS	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	1,4-Dichlorobenzene	0.037	ND (0.0017)	ND (0.0017)	ND (0.0017)	ND (0.0017)	ND (0.0021)	ND (0.00150)							
SW8000	mg/kg	1,4-Dichlorobenzene	NS	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	2,2-Dichloropropane	NS	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	2-Butanone (MEK)	NS	ND (0.163)	ND (0.171)	ND (0.173)	ND (0.172)	ND (0.198)	ND (0.199)	ND (0.176)	ND (0.174)	ND (0.165)	ND (0.173)	ND (0.125)		
SW8000	mg/kg	2-Chlorobutane	NS	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	2-Hexanone	0.11	ND (0.0785)	ND (0.0820)	ND (0.0820)	ND (0.0820)	ND (0.0950)	ND (0.0950)	ND (0.0840)	ND (0.0840)	ND (0.0825)	ND (0.0825)	ND (0.0600)		
SW8000	mg/kg	4-Chlorotoluene	NS	ND (0.0131)	ND (0.0137)	ND (0.0139)	ND (0.0137)	ND (0.0159)	ND (0.0152)	ND (0.0140)	ND (0.0139)	ND (0.0132)	ND (0.0138)	ND (0.0100)		
SW8000	mg/kg	4-Isopropyltoluene	NS	ND (0.0220)	ND (0.0245)	ND (0.0255)	ND (0.0255)	ND (0.0285)	ND (0.0285)	ND (0.0260)	ND (0.0255)	ND (0.0252)	ND (0.0250)	ND (0.0100)		
SW8000	mg/kg	4-Methyl-2-pentanone (MIBK)	18	ND (0.163)	ND (0.171)	ND (0.173)	ND (0.172)	ND (0.198)	ND (0.199)	ND (0.176)	ND (0.174)	ND (0.165)	ND (0.173)	ND (0.125)		
SW8000	mg/kg	Acetone	NS	ND (0.163)	ND (0.171)	ND (0.173)	ND (0.172)	ND (0.198)	ND (0.199)	ND (0.176)	ND (0.174)	ND (0.165)	ND (0.173)	ND (0.125)		
SW8000	mg/kg	Benzene	0.022	ND (0.00815)	ND (0.00855)	ND (0.00865)	ND (0.00855)	ND (0.00990)	ND (0.00945)	ND (0.00875)	ND (0.00865)	ND (0.00825)	ND (0.00860)	ND (0.00625)		
SW8000	mg/kg	Bromobenzene	0.36	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	Bromochloroethane	NS	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	Bromodichloroethane	0.0043	ND (0.00130)	ND (0.00137)	ND (0.00139)	ND (0.00137)	ND (0.00159)	ND (0.00152)	ND (0.00140)	ND (0.00139)	ND (0.00132)	ND (0.00138)	ND (0.00100)		
SW8000	mg/kg	Bromoforn	0.1	ND (0.0163)	ND (0.0171)	ND (0.0171)	ND (0.0171)	ND (0.0198)	ND (0.0198)	ND (0.0176)	ND (0.0174)	ND (0.0164)	ND (0.0173)	ND (0.0125)		
SW8000	mg/kg	Bromobenzene	0.024	ND (0.0131)	ND (0.0137)	ND (0.0139)	ND (0.0137)	ND (0.0159)	ND (0.0152)	ND (0.0140)	ND (0.0139)	ND (0.0132)	ND (0.0138)	ND (0.0100)		
SW8000	mg/kg	Carbon disulfide	2.9	ND (0.0655)	ND (0.0685)	ND (0.0685)	ND (0.0685)	ND (0.0790)	ND (0.0755)	ND (0.0700)	ND (0.0695)	ND (0.0660)	ND (0.0660)	ND (0.0500)		

## 5472 Mail Trail Road, Analytical Soil Results Summary Table, 1216690

Data Flag / Abbreviation	Definition
B	Analyte result is considered a high estimated value due to contamination present in the method, trip, or equipment blank. ND results are not flagged.
D	The reported value is from a dilution.
DL	Detection Limit
H	Analyte result is considered a low estimate due to a hold time exceedance.
J	Analyte result is considered an estimated value because the level is below the laboratory LOQ but above the DL
LL	(Low Level) Analysis with lower reporting limits than standard methanol preservative analysis.
LOD	Limit of Detection
LOQ	Limit of Quantitation (equivalent to Method Reporting Limit)
M	Manual integrated compound.
ND	(Not Detected) Analyte not detected above the Method Detection Limit.
NS	(Not Stipulated) Cleanup level not stipulated by ADEC.
NA	Not Applicable
QH, QL, QN	Analyte result is considered an estimated value biased (high, low, uncertain) due to a quality control failure.
R	Analyte result is rejected; the result is not usable. Note that "R" replaces the chemical result (no result shall be reported with an "R" flag).
RL	Reporting Limit
X	Surrogate recovery outside control limits
*	LCS/LCSD or RPD of LCS/LCSD is out side of control limits

Notes
ADEC regulatory limits / cleanup levels for soil samples are the most stringent of 18 AAC 75.341 Method 2 Table B1 and B2 Cleanup Level for under 40 Inches. 18 AAC 75.341 Revision Dated November 2021. Results column consists of the results if the compound is detected above the method detection limit. Otherwise it gives the ND symbol. The number in brackets is the LOD.

**Appendix D:**  
**Field Notes**

EVERTS AIR FUEL  
5472 MAIL TRAIL  
STOCKPILE UNDERLINER



*Rite in the Rain.*  
ALL-WEATHER  
**FIELD**  
No 351FX

2 10/6/2021 5472 MAIL TRAIL

0930 ARRIVE ONSITE D. STAHL, T. TEUNISSEN  
AT 5472 MAIL TRAIL ROAD. MEET W KAREN  
WING OF EVERT. SHE UNLOCKS THE GATE +  
SHOWS US THE FORMER STOCKPILE LOCATION

0935 KAREN OFFSITE - TYLER LAYS OUT STOCKPILE  
FOOT PRINT IN PREP FOR FIELD SCREEN  
COLLECTION

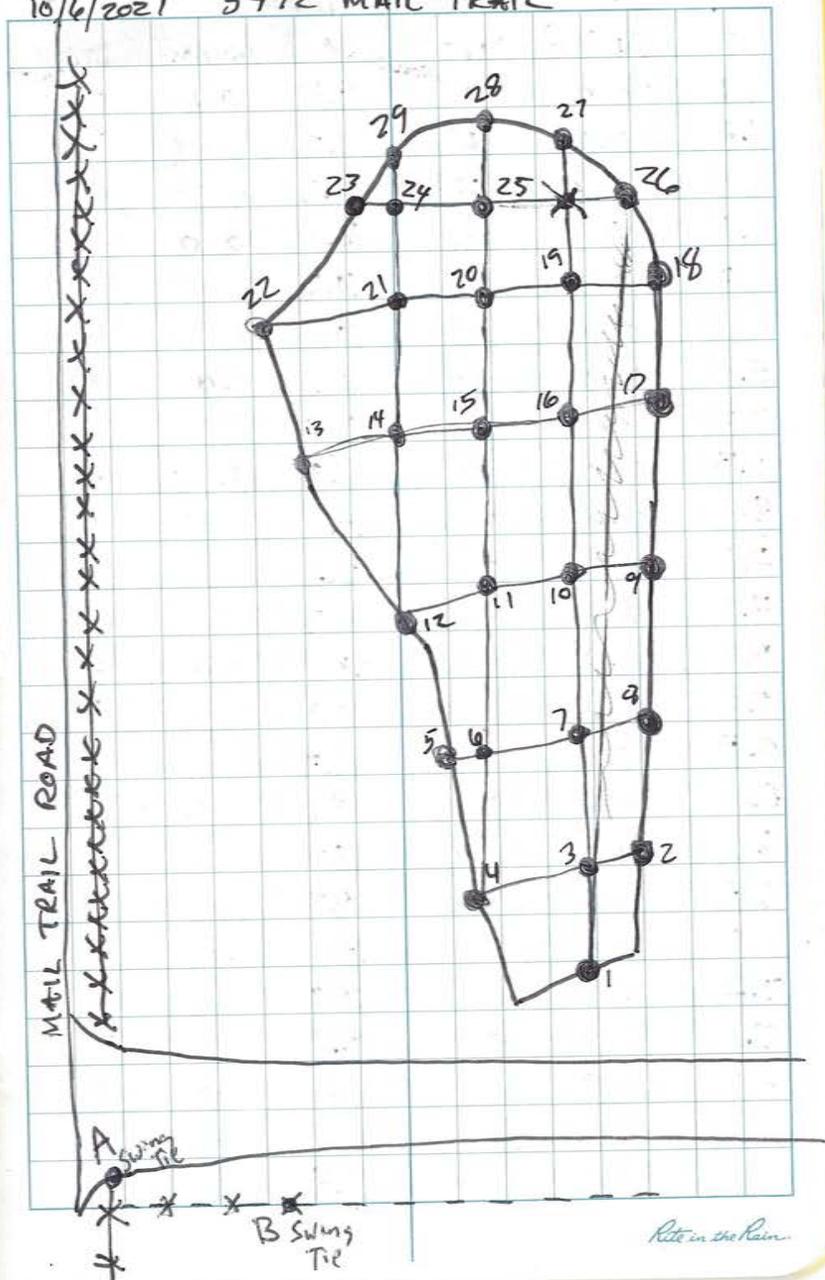
1030 TYLER OFFSITE TO PICKUP TOOLS FOR  
FROZEN GROUND DIGGING

1045 J. KLYNSTRA ONSITE TO ASSIST

1115 TYLER BACK ONSITE

10/6/2021 5472 MAIL TRAIL

3



10/6/2021 5472 MAIL TRAIL

#	PID (PPM)	DEPTH (INCHES)	#	PID (PPM)	DEPTH (INCHES)
1.1	0.0	0	9.1	0.1	0
1.2	0.0	6"	9.2	0.0	6
1.3	0.0	12"	9.3	0.0	12
2.1	0.0	0	10.1	0.0	0
2.2	0.0	6	10.2	0.0	6
2.3	0.0	12	10.3	0.0	12
3.1	0.0	0	11.1	0.0	0
3.2	0.0	6	11.2	0.0	6
3.3	0.0	12	11.3	0.0	12
4.1	0.0	0	12.1	0.0	0
4.2	0.0	6	12.2	0.0	6
4.3	0.0	12	12.3	0.0	12
5.1	0.0	0	13.1	0.0	0
5.2	0.1	6	13.2	0.0	6
5.3	0.0	12	13.3	0.0	12
6.1	0.0	0	14.1	0.2	0
6.2	0.1	6	14.2	0.0	6
6.3	0.0	12	14.3	0.0	12
7.1	0.0	0	15.1	0.0	0
7.2	0.0	6	15.2	0.0	6
7.3	0.0	12	15.3	0.0	12
8.1	0.0	0	16.1	0.0	0
8.2	0.0	6	16.2	0.0	6
8.3	0.0	12	16.3	0.0	12

10/6/2021 5472 MAIL TRAIL

#	PID (PPM)	DEPTH (INCHES)	#	PID	DEPTH
17.1	0.0	0	24.1	0.0	0
17.2	0.0	6	24.2	0.0	6
17.3	0.0	12	24.3	0.0	12
18.1	0.0	0	25.1	0.0	0
18.2	0.0	6	25.2	0.0	6
18.3	0.0	12	25.3	0.0	12
19.1	0.0	0	26.1	0.0	0
19.2	0.0	6	26.2	0.0	6
19.3	0.0	12	26.3	0.0	12
20.1	0.0	0	27.1	0.0	0
20.2	0.0	6	27.2	0.0	6
20.3	0.0	12	27.3	0.0	12
21.1	0.0	0	28.1	0.0	0
21.2	0.0	6	28.2	0.0	6
21.3	0.0	12	28.3	0.0	12
22.1	0.0	0	29.1	0.0	0
22.2	0.0	6	29.2	0.0	6
22.3	0.0	12	29.3	0.0	12
23.1	0.0	0			
23.2	0.0	6			
23.3	0.0	12			

ALL HEATED BAGS WERE CHECKED FOR  
FUEL ODORS FOLLOWING PIA RESULT

6 10/6/2021 MAIL TRAIL

ANALYTICAL SUMMARY TABLE

TIME	ID	FS#	NOTES
1358	21-MTR-01	6.2	*
1403	21-MTR-02	6.2	DUPOF 01
1408	21-MTR-03	2.1	
1413	21-MTR-04	4.3	
1418	21-MTR-05	9.1	
1423	21-MTR-06	<del>13.1</del>	
1428	21-MTR-07	15.3	
1433	21-MTR-08	19.2	
1438	21-MTR-09	24.3	
1443	21-MTR-10	27.1	

\* VOC/GRO by 8260D, EBD by 8260D SIM,  
DRO by AK102, LEAD by 6020A

PAH FOR 10% OF SAMPLES @ HIGHEST POC

7  
Swing tie locations marked on Map  
on page #3

Swing Tie A - corner of fence Gate  
Swing Tie B - Corner fence post + 3 posts

FS#	A	B
6.2	83	88
6.2	83	88
2.1	86	82
4.3	71	74
9.1	104	105
13.1	96	108
15.3	101	108
19.2	115	120
24.3	113	123
27.1	124	130

**Appendix E:**  
**Laboratory Analytical Report**  
**&**  
**ADEC Lab Quality Checklist**



## Laboratory Report of Analysis

To: Alaska Resources and Env. Svcs  
P.O. Box 83050  
Fairbanks, AK 99708

Report Number: **1216690**

Client Project: **Everts AirFuel, 5472 MailTrail**

Dear Lyle Gresehover,

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 Jennifer 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.

---

Jennifer Dawkins  
Project Manager  
Jennifer.Dawkins@sgs.com

Date

### Case Narrative

SGS Client: **Alaska Resources and Env. Svcs**  
SGS Project: **1216690**  
Project Name/Site: **Everts AirFuel, 5472 MailTrail**  
Project Contact: **Lyle Gresehover**

Refer to sample receipt form for information on sample condition.

**1216690001MS (1641131) MS**

8270D SIM - PAH MS recoveries for fluoranthene and phenanthrene do not meet QC criteria. Refer to the LCS for accuracy requirements.

**1216721001(1641511MS) (1641513) MS**

8260D - MS recoveries for Trichlorofluoromethane and Hexachlorobutadiene do not meet QC criteria. See LCS for accuracy requirements.

**1215672004(1642562MS) (1642563) MS**

6020B - Metals MS recoveries for barium and chromium do not meet QC criteria. The post digestion spike was successful.

**1216889025(1643048MS) (1643049) MS**

8260D - MS recoveries for Trichlorofluoromethane, Carbon disulfide, and Hexachlorobutadiene do not meet QC criteria. See LCS for accuracy requirements.

**1216953003(1643946MS) (1643947) MS**

6020B-MS recoveries for multiple analytes do not meet the QC criteria. The post digestion spike was successful.

**1216690001(1641454MSD) (1641458) MSD**

8260D - MSD recoveries for 1,2,4-Trichlorobenzene and 1,2,3-Trichlorobenzene do not meet QC criteria. See LCS for accuracy requirements.

**1216721001(1641511MSD) (1641514) MSD**

8260D - MSD recoveries for Trichlorofluoromethane and Hexachlorobutadiene do not meet QC criteria. See LCS for accuracy requirements.

**1215672004(1642562MSD) (1642564) MSD**

6020B - Metals MSD recovery for chromium does not meet QC criteria. The post digestion spike was successful.

**1216889025(1643048MSD) (1643050) MSD**

8260D - MSD recoveries for Hexachlorobutadiene and 1,2,3-Trichlorobenzene do not meet QC criteria. See LCS for accuracy requirements.

**1216953003(1643946MSD) (1643948) MSD**

6020B-MSD recoveries for multiple analytes do not meet the QC criteria. The post digestion spike was successful. 6020B-MS/MSD RPD for calcium does not meet the QC criteria. Refer to the sample duplicate for precision.

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

### Report of Manual Integrations

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Analytical Batch</u>	<u>Analyte</u>	<u>Reason</u>
<b>8270D SIM (PAH)</b>				
1216690001	21-MTR-01	XMS12949	Benzo(a)Anthracene	RP
1216690001	21-MTR-01	XMS12949	Benzo[k]fluoranthene	RP
1216690002	21-MTR-02	XMS12949	Benzo[k]fluoranthene	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, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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

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

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

### Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
21-MTR-01	1216690001	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-02	1216690002	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-03	1216690003	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-04	1216690004	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-05	1216690005	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-06	1216690006	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-07	1216690007	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-08	1216690008	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-09	1216690009	10/06/2021	10/08/2021	Soil/Solid (dry weight)
21-MTR-10	1216690010	10/06/2021	10/08/2021	Soil/Solid (dry weight)
Trip Blank	1216690011	10/06/2021	10/08/2021	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)
SW6020B	Metals by ICP-MS (S)
SM21 2540G	Percent Solids SM2540G
SW8260D-SIM	SW8260-SIM (S)
SW8260D	VOC 8260 (S) Field Extracted

Print Date: 10/25/2021 8:48:03AM

### Detectable Results Summary

Client Sample ID: **21-MTR-01**

Lab Sample ID: 1216690001

**Metals by ICP/MS**

**Polynuclear Aromatics GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	19.2	mg/kg
Benzo(a)Anthracene	10.9J	ug/kg
Benzo[a]pyrene	16.2J	ug/kg
Benzo[b]Fluoranthene	22.8J	ug/kg
Benzo[g,h,i]perylene	15.7J	ug/kg
Benzo[k]fluoranthene	8.40J	ug/kg
Chrysene	17.9J	ug/kg
Fluoranthene	25.2J	ug/kg
Indeno[1,2,3-c,d] pyrene	11.3J	ug/kg
Phenanthrene	10.8J	ug/kg
Pyrene	21.9J	ug/kg
Diesel Range Organics	16.4J	mg/kg

**Semivolatile Organic Fuels**

Client Sample ID: **21-MTR-02**

Lab Sample ID: 1216690002

**Metals by ICP/MS**

**Polynuclear Aromatics GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	24.1	mg/kg
Benzo(a)Anthracene	8.79J	ug/kg
Benzo[a]pyrene	13.7J	ug/kg
Benzo[b]Fluoranthene	19.7J	ug/kg
Benzo[g,h,i]perylene	11.9J	ug/kg
Benzo[k]fluoranthene	7.59J	ug/kg
Chrysene	15.9J	ug/kg
Fluoranthene	18.7J	ug/kg
Indeno[1,2,3-c,d] pyrene	9.17J	ug/kg
Phenanthrene	9.00J	ug/kg
Pyrene	17.2J	ug/kg
Diesel Range Organics	13.8J	mg/kg

**Semivolatile Organic Fuels**

Client Sample ID: **21-MTR-03**

Lab Sample ID: 1216690003

**Metals by ICP/MS**

**Semivolatile Organic Fuels**

**Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	21.6	mg/kg
Diesel Range Organics	42.6	mg/kg
Toluene	15.9J	ug/kg
Trichlorofluoromethane	10400	ug/kg

Client Sample ID: **21-MTR-04**

Lab Sample ID: 1216690004

**Metals by ICP/MS**

**Semivolatile Organic Fuels**

**Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	36.7	mg/kg
Diesel Range Organics	26.7	mg/kg
Trichlorofluoromethane	34.3J	ug/kg

Client Sample ID: **21-MTR-05**

Lab Sample ID: 1216690005

**Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	6.24	mg/kg

### Detectable Results Summary

Client Sample ID: **21-MTR-06**

Lab Sample ID: 1216690006

**Metals by ICP/MS**

**Semivolatile Organic Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	28.3	mg/kg
Diesel Range Organics	21.4J	mg/kg

Client Sample ID: **21-MTR-07**

Lab Sample ID: 1216690007

**Metals by ICP/MS**

**Semivolatile Organic Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	19.7	mg/kg
Diesel Range Organics	13.3J	mg/kg

Client Sample ID: **21-MTR-08**

Lab Sample ID: 1216690008

**Metals by ICP/MS**

**Semivolatile Organic Fuels**

**Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	15.5	mg/kg
Diesel Range Organics	20.5J	mg/kg
P & M -Xylene	21.5J	ug/kg
Tetrachloroethene	11.1J	ug/kg
Trichlorofluoromethane	136	ug/kg

Client Sample ID: **21-MTR-09**

Lab Sample ID: 1216690009

**Metals by ICP/MS**

**Semivolatile Organic Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	24.6	mg/kg
Diesel Range Organics	19.5J	mg/kg

Client Sample ID: **21-MTR-10**

Lab Sample ID: 1216690010

**Metals by ICP/MS**

**Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Lead	6.66	mg/kg
Trichlorofluoromethane	35.5J	ug/kg



Results of 21-MTR-01

Client Sample ID: 21-MTR-01  
Client Project ID: Everts AirFuel, 5472 MailTrail  
Lab Sample ID: 1216690001  
Lab Project ID: 1216690

Collection Date: 10/06/21 13:58  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):90.9  
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	19.2	2.08	0.644	mg/kg	100		10/17/21 18:48

Batch Information

Analytical Batch: MMS11349  
Analytical Method: SW6020B  
Analyst: ACF  
Analytical Date/Time: 10/17/21 18:48  
Container ID: 1216690001-A

Prep Batch: MXX34742  
Prep Method: SW3050B  
Prep Date/Time: 10/17/21 08:35  
Prep Initial Wt./Vol.: 1.059 g  
Prep Extract Vol: 50 mL



Results of 21-MTR-01

Client Sample ID: 21-MTR-01
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690001
Lab Project ID: 1216690

Collection Date: 10/06/21 13:58
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):90.9
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 surrogate standards.

Batch Information

Analytical Batch: XMS12949
Analytical Method: 8270D SIM (PAH)
Analyst: LAW
Analytical Date/Time: 10/13/21 07:52
Container ID: 1216690001-A

Prep Batch: XXX45706
Prep Method: SW3550C
Prep Date/Time: 10/10/21 14:16
Prep Initial Wt./Vol.: 22.945 g
Prep Extract Vol: 5 mL

## Results of 21-MTR-01

Client Sample ID: **21-MTR-01**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690001  
 Lab Project ID: 1216690

Collection Date: 10/06/21 13:58  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):90.9  
 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	16.4 J	21.9	9.87	mg/kg	1		10/11/21 17:11
<b>Surrogates</b>							
5a Androstane (surr)	95	50-150		%	1		10/11/21 17:11

## Batch Information

Analytical Batch: XFC16108  
 Analytical Method: AK102  
 Analyst: IVM  
 Analytical Date/Time: 10/11/21 17:11  
 Container ID: 1216690001-A

Prep Batch: XXX45705  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/21 13:10  
 Prep Initial Wt./Vol.: 30.113 g  
 Prep Extract Vol: 5 mL

## Results of 21-MTR-01

Client Sample ID: **21-MTR-01**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690001  
 Lab Project ID: 1216690

Collection Date: 10/06/21 13:58  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):90.9  
 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	1.63 U	3.26	0.979	mg/kg	1		10/08/21 16:07
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	118	50-150		%	1		10/08/21 16:07

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 16:07  
 Container ID: 1216690001-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 13:58  
 Prep Initial Wt./Vol.: 49.797 g  
 Prep Extract Vol: 29.5465 mL



Results of 21-MTR-01

Client Sample ID: 21-MTR-01
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690001
Lab Project ID: 1216690

Collection Date: 10/06/21 13:58
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):90.9
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.



Results of 21-MTR-01

Client Sample ID: 21-MTR-01
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690001
Lab Project ID: 1216690

Collection Date: 10/06/21 13:58
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):90.9
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.

## Results of 21-MTR-01

Client Sample ID: **21-MTR-01**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690001  
Lab Project ID: 1216690

Collection Date: 10/06/21 13:58  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):90.9  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 15:25  
Container ID: 1216690001-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 13:58  
Prep Initial Wt./Vol.: 49.797 g  
Prep Extract Vol: 29.5465 mL

## Results of 21-MTR-01

Client Sample ID: **21-MTR-01**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690001  
 Lab Project ID: 1216690

Collection Date: 10/06/21 13:58  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):90.9  
 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	0.0815 U	0.163	0.0405	ug/kg	1		10/15/21 16:43
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	105	55-151		%	1		10/15/21 16:43
Toluene-d8 (surr)	98.4	85-116		%	1		10/15/21 16:43

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 16:43  
 Container ID: 1216690001-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 13:58  
 Prep Initial Wt./Vol.: 49.797 g  
 Prep Extract Vol: 29.5465 mL



**Results of 21-MTR-02**

Client Sample ID: **21-MTR-02**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690002  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:03  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):89.3  
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	24.1	2.07	0.642	mg/kg	100		10/17/21 18:52

**Batch Information**

Analytical Batch: MMS11349  
Analytical Method: SW6020B  
Analyst: ACF  
Analytical Date/Time: 10/17/21 18:52  
Container ID: 1216690002-A

Prep Batch: MXX34742  
Prep Method: SW3050B  
Prep Date/Time: 10/17/21 08:35  
Prep Initial Wt./Vol.: 1.082 g  
Prep Extract Vol: 50 mL



Results of 21-MTR-02

Client Sample ID: 21-MTR-02
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690002
Lab Project ID: 1216690

Collection Date: 10/06/21 14:03
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):89.3
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 quality and detection data.

Batch Information

Analytical Batch: XMS12949
Analytical Method: 8270D SIM (PAH)
Analyst: LAW
Analytical Date/Time: 10/13/21 08:53
Container ID: 1216690002-A

Prep Batch: XXX45706
Prep Method: SW3550C
Prep Date/Time: 10/10/21 14:16
Prep Initial Wt./Vol.: 22.831 g
Prep Extract Vol: 5 mL



**Results of 21-MTR-02**

Client Sample ID: **21-MTR-02**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690002  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:03  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):89.3  
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	13.8 J	22.2	10.0	mg/kg	1		10/11/21 17:21
<b>Surrogates</b>							
5a Androstane (surr)	79.2	50-150		%	1		10/11/21 17:21

**Batch Information**

Analytical Batch: XFC16108  
Analytical Method: AK102  
Analyst: IVM  
Analytical Date/Time: 10/11/21 17:21  
Container ID: 1216690002-A

Prep Batch: XXX45705  
Prep Method: SW3550C  
Prep Date/Time: 10/10/21 13:10  
Prep Initial Wt./Vol.: 30.248 g  
Prep Extract Vol: 5 mL

## Results of 21-MTR-02

Client Sample ID: **21-MTR-02**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690002  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:03  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):89.3  
 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	1.71 U	3.42	1.03	mg/kg	1		10/08/21 16:25
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	111	50-150		%	1		10/08/21 16:25

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 16:25  
 Container ID: 1216690002-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:03  
 Prep Initial Wt./Vol.: 49.675 g  
 Prep Extract Vol: 30.3326 mL



Results of 21-MTR-02

Client Sample ID: 21-MTR-02
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690002
Lab Project ID: 1216690

Collection Date: 10/06/21 14:03
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):89.3
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.



Results of 21-MTR-02

Client Sample ID: 21-MTR-02
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690002
Lab Project ID: 1216690

Collection Date: 10/06/21 14:03
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):89.3
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.

## Results of 21-MTR-02

Client Sample ID: **21-MTR-02**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690002  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:03  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):89.3  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 16:47  
Container ID: 1216690002-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:03  
Prep Initial Wt./Vol.: 49.675 g  
Prep Extract Vol: 30.3326 mL

## Results of 21-MTR-02

Client Sample ID: **21-MTR-02**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690002  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:03  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):89.3  
 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	0.0855 U	0.171	0.0424	ug/kg	1		10/15/21 16:58
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	110	55-151		%	1		10/15/21 16:58
Toluene-d8 (surr)	99.2	85-116		%	1		10/15/21 16:58

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 16:58  
 Container ID: 1216690002-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:03  
 Prep Initial Wt./Vol.: 49.675 g  
 Prep Extract Vol: 30.3326 mL



**Results of 21-MTR-03**

Client Sample ID: **21-MTR-03**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690003  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:08  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.2  
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	21.6	2.10	0.650	mg/kg	100		10/17/21 18:56

**Batch Information**

Analytical Batch: MMS11349  
Analytical Method: SW6020B  
Analyst: ACF  
Analytical Date/Time: 10/17/21 18:56  
Container ID: 1216690003-A

Prep Batch: MXX34742  
Prep Method: SW3050B  
Prep Date/Time: 10/17/21 08:35  
Prep Initial Wt./Vol.: 1.082 g  
Prep Extract Vol: 50 mL



**Results of 21-MTR-03**

Client Sample ID: **21-MTR-03**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690003  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:08  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.2  
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	42.6		22.6	10.2	mg/kg	1		10/11/21 17:30
<b>Surrogates</b>								
5a Androstane (surr)	88.6		50-150		%	1		10/11/21 17:30

**Batch Information**

Analytical Batch: XFC16108  
Analytical Method: AK102  
Analyst: IVM  
Analytical Date/Time: 10/11/21 17:30  
Container ID: 1216690003-A

Prep Batch: XXX45705  
Prep Method: SW3550C  
Prep Date/Time: 10/10/21 13:10  
Prep Initial Wt./Vol.: 30.082 g  
Prep Extract Vol: 5 mL

## Results of 21-MTR-03

Client Sample ID: **21-MTR-03**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690003  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:08  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.2  
 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	1.73 U	3.46	1.04	mg/kg	1		10/08/21 16:43
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	125	50-150		%	1		10/08/21 16:43

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 16:43  
 Container ID: 1216690003-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:08  
 Prep Initial Wt./Vol.: 50.805 g  
 Prep Extract Vol: 31.0203 mL



Results of 21-MTR-03

Client Sample ID: 21-MTR-03
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690003
Lab Project ID: 1216690

Collection Date: 10/06/21 14:08
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.2
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.



Results of 21-MTR-03

Client Sample ID: 21-MTR-03
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690003
Lab Project ID: 1216690

Collection Date: 10/06/21 14:08
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.2
Location:

Results by Volatile GC/MS

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

## Results of 21-MTR-03

Client Sample ID: **21-MTR-03**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690003  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:08  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.2  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21293  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/18/21 15:11  
Container ID: 1216690003-B

Prep Batch: VXX38048  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:08  
Prep Initial Wt./Vol.: 50.805 g  
Prep Extract Vol: 31.0203 mL

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 17:04  
Container ID: 1216690003-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:08  
Prep Initial Wt./Vol.: 50.805 g  
Prep Extract Vol: 31.0203 mL

## Results of 21-MTR-03

Client Sample ID: **21-MTR-03**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690003  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:08  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.2  
 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	0.0865 U	0.173	0.0429	ug/kg	1		10/15/21 17:13
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	112	55-151		%	1		10/15/21 17:13
Toluene-d8 (surr)	99.2	85-116		%	1		10/15/21 17:13

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 17:13  
 Container ID: 1216690003-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:08  
 Prep Initial Wt./Vol.: 50.805 g  
 Prep Extract Vol: 31.0203 mL

## Results of 21-MTR-04

Client Sample ID: **21-MTR-04**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690004  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:13  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):89.1  
 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	36.7	2.24	0.694	mg/kg	100		10/17/21 19:00

## Batch Information

Analytical Batch: MMS11349  
 Analytical Method: SW6020B  
 Analyst: ACF  
 Analytical Date/Time: 10/17/21 19:00  
 Container ID: 1216690004-A

Prep Batch: MXX34742  
 Prep Method: SW3050B  
 Prep Date/Time: 10/17/21 08:35  
 Prep Initial Wt./Vol.: 1.003 g  
 Prep Extract Vol: 50 mL

## Results of 21-MTR-04

Client Sample ID: **21-MTR-04**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690004  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:13  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):89.1  
 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	26.7	22.2	10.0	mg/kg	1		10/11/21 17:40
<b>Surrogates</b>							
5a Androstane (surr)	84.9	50-150		%	1		10/11/21 17:40

## Batch Information

Analytical Batch: XFC16108  
 Analytical Method: AK102  
 Analyst: IVM  
 Analytical Date/Time: 10/11/21 17:40  
 Container ID: 1216690004-A

Prep Batch: XXX45705  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/21 13:10  
 Prep Initial Wt./Vol.: 30.316 g  
 Prep Extract Vol: 5 mL

## Results of 21-MTR-04

Client Sample ID: **21-MTR-04**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690004  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:13  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):89.1  
 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	1.72 U	3.43	1.03	mg/kg	1		10/08/21 17:01
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	116	50-150		%	1		10/08/21 17:01

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 17:01  
 Container ID: 1216690004-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:13  
 Prep Initial Wt./Vol.: 49.938 g  
 Prep Extract Vol: 30.4645 mL



Results of 21-MTR-04

Client Sample ID: 21-MTR-04
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690004
Lab Project ID: 1216690

Collection Date: 10/06/21 14:13
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):89.1
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.



Results of 21-MTR-04

Client Sample ID: 21-MTR-04
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690004
Lab Project ID: 1216690

Collection Date: 10/06/21 14:13
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):89.1
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.

## Results of 21-MTR-04

Client Sample ID: **21-MTR-04**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690004  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:13  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):89.1  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 17:20  
Container ID: 1216690004-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:13  
Prep Initial Wt./Vol.: 49.938 g  
Prep Extract Vol: 30.4645 mL

## Results of 21-MTR-04

Client Sample ID: **21-MTR-04**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690004  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:13  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):89.1  
 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	0.0855 U	0.171	0.0425	ug/kg	1		10/15/21 17:28
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	118	55-151		%	1		10/15/21 17:28
Toluene-d8 (surr)	101	85-116		%	1		10/15/21 17:28

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 17:28  
 Container ID: 1216690004-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:13  
 Prep Initial Wt./Vol.: 49.938 g  
 Prep Extract Vol: 30.4645 mL



**Results of 21-MTR-05**

Client Sample ID: **21-MTR-05**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690005  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):83.6  
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	6.24	2.37	0.734	mg/kg	100		10/17/21 19:04

**Batch Information**

Analytical Batch: MMS11349  
Analytical Method: SW6020B  
Analyst: ACF  
Analytical Date/Time: 10/17/21 19:04  
Container ID: 1216690005-A

Prep Batch: MXX34742  
Prep Method: SW3050B  
Prep Date/Time: 10/17/21 08:35  
Prep Initial Wt./Vol.: 1.011 g  
Prep Extract Vol: 50 mL

## Results of 21-MTR-05

Client Sample ID: **21-MTR-05**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690005  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):83.6  
 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	11.9 U	23.8	10.7	mg/kg	1		10/11/21 17:50
<b>Surrogates</b>							
5a Androstane (surr)	86.3	50-150		%	1		10/11/21 17:50

## Batch Information

Analytical Batch: XFC16108  
 Analytical Method: AK102  
 Analyst: IVM  
 Analytical Date/Time: 10/11/21 17:50  
 Container ID: 1216690005-A

Prep Batch: XXX45705  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/21 13:10  
 Prep Initial Wt./Vol.: 30.138 g  
 Prep Extract Vol: 5 mL

## Results of 21-MTR-05

Client Sample ID: **21-MTR-05**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690005  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):83.6  
 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	1.98 U	3.96	1.19	mg/kg	1		10/08/21 17:19
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	133	50-150		%	1		10/08/21 17:19

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 17:19  
 Container ID: 1216690005-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:18  
 Prep Initial Wt./Vol.: 50.224 g  
 Prep Extract Vol: 33.2369 mL



**Results of 21-MTR-05**

Client Sample ID: **21-MTR-05**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690005  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):83.6  
 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	15.9 U	31.7	9.82	ug/kg	1		10/11/21 17:37
1,1,1-Trichloroethane	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,1,2,2-Tetrachloroethane	1.59 U	3.17	0.982	ug/kg	1		10/11/21 17:37
1,1,2-Trichloroethane	0.790 U	1.58	0.792	ug/kg	1		10/11/21 17:37
1,1-Dichloroethane	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,1-Dichloroethene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,1-Dichloropropene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,2,3-Trichlorobenzene	79.0 U	158	47.5	ug/kg	1		10/11/21 17:37
1,2,3-Trichloropropane	1.59 U	3.17	0.982	ug/kg	1		10/11/21 17:37
1,2,4-Trichlorobenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,2,4-Trimethylbenzene	79.0 U	158	47.5	ug/kg	1		10/11/21 17:37
1,2-Dibromo-3-chloropropane	79.0 U	158	49.1	ug/kg	1		10/11/21 17:37
1,2-Dibromoethane	1.19 U	2.37	1.19	ug/kg	1		10/11/21 17:37
1,2-Dichlorobenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,2-Dichloroethane	1.59 U	3.17	1.11	ug/kg	1		10/11/21 17:37
1,2-Dichloropropane	7.90 U	15.8	7.92	ug/kg	1		10/11/21 17:37
1,3,5-Trimethylbenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,3-Dichlorobenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
1,3-Dichloropropane	7.90 U	15.8	4.91	ug/kg	1		10/11/21 17:37
1,4-Dichlorobenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
2,2-Dichloropropane	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
2-Butanone (MEK)	198 U	396	123	ug/kg	1		10/11/21 17:37
2-Chlorotoluene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
2-Hexanone	95.0 U	190	95.0	ug/kg	1		10/11/21 17:37
4-Chlorotoluene	15.9 U	31.7	15.8	ug/kg	1		10/11/21 17:37
4-Isopropyltoluene	63.5 U	127	63.3	ug/kg	1		10/11/21 17:37
4-Methyl-2-pentanone (MIBK)	198 U	396	123	ug/kg	1		10/11/21 17:37
Acetone	198 U	396	174	ug/kg	1		10/11/21 17:37
Benzene	9.90 U	19.8	6.17	ug/kg	1		10/11/21 17:37
Bromobenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Bromochloromethane	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Bromodichloromethane	1.59 U	3.17	0.982	ug/kg	1		10/11/21 17:37
Bromoform	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Bromomethane	15.9 U	31.7	12.7	ug/kg	1		10/11/21 17:37
Carbon disulfide	79.0 U	158	49.1	ug/kg	1		10/11/21 17:37
Carbon tetrachloride	9.90 U	19.8	6.17	ug/kg	1		10/11/21 17:37
Chlorobenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37



**Results of 21-MTR-05**

Client Sample ID: **21-MTR-05**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690005  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):83.6  
 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	317	98.2	ug/kg	1		10/11/21 17:37
Chloroform	4.75 U	9.50	4.75	ug/kg	1		10/11/21 17:37
Chloromethane	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
cis-1,2-Dichloroethene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
cis-1,3-Dichloropropene	9.90 U	19.8	6.17	ug/kg	1		10/11/21 17:37
Dibromochloromethane	3.96 U	7.92	2.37	ug/kg	1		10/11/21 17:37
Dibromomethane	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Dichlorodifluoromethane	79.0 U	158	47.5	ug/kg	1		10/11/21 17:37
Ethylbenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Freon-113	79.0 U	158	49.1	ug/kg	1		10/11/21 17:37
Hexachlorobutadiene	15.9 U	31.7	9.82	ug/kg	1		10/11/21 17:37
Isopropylbenzene (Cumene)	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Methylene chloride	79.0 U	158	49.1	ug/kg	1		10/11/21 17:37
Methyl-t-butyl ether	79.0 U	158	49.1	ug/kg	1		10/11/21 17:37
Naphthalene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
n-Butylbenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
n-Propylbenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
o-Xylene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
P & M -Xylene	39.6 U	79.2	23.7	ug/kg	1		10/11/21 17:37
sec-Butylbenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Styrene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
tert-Butylbenzene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
Tetrachloroethene	9.90 U	19.8	6.17	ug/kg	1		10/11/21 17:37
Toluene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
trans-1,2-Dichloroethene	19.8 U	39.6	12.3	ug/kg	1		10/11/21 17:37
trans-1,3-Dichloropropene	9.90 U	19.8	6.17	ug/kg	1		10/11/21 17:37
Trichloroethene	7.90 U	15.8	5.07	ug/kg	1		10/11/21 17:37
Trichlorofluoromethane	39.6 U	79.2	23.7	ug/kg	1		10/11/21 17:37
Vinyl acetate	79.0 U	158	49.1	ug/kg	1		10/11/21 17:37
Vinyl chloride	0.635 U	1.27	0.396	ug/kg	1		10/11/21 17:37
Xylenes (total)	59.5 U	119	36.1	ug/kg	1		10/11/21 17:37
<b>Surrogates</b>							
1,2-Dichloroethane-D4 (surr)	108	71-136		%	1		10/11/21 17:37
4-Bromofluorobenzene (surr)	127	55-151		%	1		10/11/21 17:37
Toluene-d8 (surr)	101	85-116		%	1		10/11/21 17:37

## Results of 21-MTR-05

Client Sample ID: **21-MTR-05**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690005  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):83.6  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 17:37  
Container ID: 1216690005-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:18  
Prep Initial Wt./Vol.: 50.224 g  
Prep Extract Vol: 33.2369 mL

## Results of 21-MTR-05

Client Sample ID: **21-MTR-05**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690005  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:18  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):83.6  
 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	0.0990 U	0.198	0.0491	ug/kg	1		10/15/21 17:43
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	140	55-151		%	1		10/15/21 17:43
Toluene-d8 (surr)	99	85-116		%	1		10/15/21 17:43

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 17:43  
 Container ID: 1216690005-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:18  
 Prep Initial Wt./Vol.: 50.224 g  
 Prep Extract Vol: 33.2369 mL



**Results of 21-MTR-06**

Client Sample ID: **21-MTR-06**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690006  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:23  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):85.0  
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	28.3	2.15	0.667	mg/kg	100		10/17/21 19:09

**Batch Information**

Analytical Batch: MMS11349  
Analytical Method: SW6020B  
Analyst: ACF  
Analytical Date/Time: 10/17/21 19:09  
Container ID: 1216690006-A

Prep Batch: MXX34742  
Prep Method: SW3050B  
Prep Date/Time: 10/17/21 08:35  
Prep Initial Wt./Vol.: 1.094 g  
Prep Extract Vol: 50 mL

## Results of 21-MTR-06

Client Sample ID: **21-MTR-06**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690006  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:23  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):85.0  
 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	21.4 J	23.3	10.5	mg/kg	1		10/11/21 18:00
<b>Surrogates</b>							
5a Androstane (surr)	90.4	50-150		%	1		10/11/21 18:00

## Batch Information

Analytical Batch: XFC16108  
 Analytical Method: AK102  
 Analyst: IVM  
 Analytical Date/Time: 10/11/21 18:00  
 Container ID: 1216690006-A

Prep Batch: XXX45705  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/21 13:10  
 Prep Initial Wt./Vol.: 30.286 g  
 Prep Extract Vol: 5 mL



**Results of 21-MTR-06**

Client Sample ID: **21-MTR-06**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690006  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:23  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):85.0  
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	3.78	1.14	mg/kg	1		10/08/21 17:38
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	126	50-150		%	1		10/08/21 17:38

**Batch Information**

Analytical Batch: VFC15880  
Analytical Method: AK101  
Analyst: IJV  
Analytical Date/Time: 10/08/21 17:38  
Container ID: 1216690006-B

Prep Batch: VXX37995  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:23  
Prep Initial Wt./Vol.: 50.769 g  
Prep Extract Vol: 32.6405 mL



Results of 21-MTR-06

Client Sample ID: 21-MTR-06  
Client Project ID: Everts AirFuel, 5472 MailTrail  
Lab Sample ID: 1216690006  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:23  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):85.0  
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	15.2 U	30.3	9.38	ug/kg	1		10/11/21 17:54
1,1,1-Trichloroethane	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,1,2,2-Tetrachloroethane	1.51 U	3.03	0.938	ug/kg	1		10/11/21 17:54
1,1,2-Trichloroethane	0.755 U	1.51	0.757	ug/kg	1		10/11/21 17:54
1,1-Dichloroethane	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,1-Dichloroethene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,1-Dichloropropene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,2,3-Trichlorobenzene	75.5 U	151	45.4	ug/kg	1		10/11/21 17:54
1,2,3-Trichloropropane	1.51 U	3.03	0.938	ug/kg	1		10/11/21 17:54
1,2,4-Trichlorobenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,2,4-Trimethylbenzene	75.5 U	151	45.4	ug/kg	1		10/11/21 17:54
1,2-Dibromo-3-chloropropane	75.5 U	151	46.9	ug/kg	1		10/11/21 17:54
1,2-Dibromoethane	1.14 U	2.27	1.14	ug/kg	1		10/11/21 17:54
1,2-Dichlorobenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,2-Dichloroethane	1.51 U	3.03	1.06	ug/kg	1		10/11/21 17:54
1,2-Dichloropropane	7.55 U	15.1	7.57	ug/kg	1		10/11/21 17:54
1,3,5-Trimethylbenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,3-Dichlorobenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
1,3-Dichloropropane	7.55 U	15.1	4.69	ug/kg	1		10/11/21 17:54
1,4-Dichlorobenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
2,2-Dichloropropane	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
2-Butanone (MEK)	189 U	378	118	ug/kg	1		10/11/21 17:54
2-Chlorotoluene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
2-Hexanone	91.0 U	182	90.8	ug/kg	1		10/11/21 17:54
4-Chlorotoluene	15.2 U	30.3	15.1	ug/kg	1		10/11/21 17:54
4-Isopropyltoluene	60.5 U	121	60.5	ug/kg	1		10/11/21 17:54
4-Methyl-2-pentanone (MIBK)	189 U	378	118	ug/kg	1		10/11/21 17:54
Acetone	189 U	378	167	ug/kg	1		10/11/21 17:54
Benzene	9.45 U	18.9	5.90	ug/kg	1		10/11/21 17:54
Bromobenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
Bromochloromethane	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
Bromodichloromethane	1.51 U	3.03	0.938	ug/kg	1		10/11/21 17:54
Bromoform	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54
Bromomethane	15.2 U	30.3	12.1	ug/kg	1		10/11/21 17:54
Carbon disulfide	75.5 U	151	46.9	ug/kg	1		10/11/21 17:54
Carbon tetrachloride	9.45 U	18.9	5.90	ug/kg	1		10/11/21 17:54
Chlorobenzene	18.9 U	37.8	11.8	ug/kg	1		10/11/21 17:54



Results of 21-MTR-06

Client Sample ID: 21-MTR-06
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690006
Lab Project ID: 1216690

Collection Date: 10/06/21 14:23
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):85.0
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.

## Results of 21-MTR-06

Client Sample ID: **21-MTR-06**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690006  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:23  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):85.0  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 17:54  
Container ID: 1216690006-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:23  
Prep Initial Wt./Vol.: 50.769 g  
Prep Extract Vol: 32.6405 mL

## Results of 21-MTR-06

Client Sample ID: **21-MTR-06**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690006  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:23  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):85.0  
 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	0.0945 U	0.189	0.0469	ug/kg	1		10/15/21 17:58
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	117	55-151		%	1		10/15/21 17:58
Toluene-d8 (surr)	99.3	85-116		%	1		10/15/21 17:58

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 17:58  
 Container ID: 1216690006-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:23  
 Prep Initial Wt./Vol.: 50.769 g  
 Prep Extract Vol: 32.6405 mL



**Results of 21-MTR-07**

Client Sample ID: **21-MTR-07**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690007  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:28  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.4  
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	19.7	2.14	0.663	mg/kg	100		10/23/21 19:34

**Batch Information**

Analytical Batch: MMS11361  
Analytical Method: SW6020B  
Analyst: DMM  
Analytical Date/Time: 10/23/21 19:34  
Container ID: 1216690007-A

Prep Batch: MXX34766  
Prep Method: SW3050B  
Prep Date/Time: 10/23/21 10:40  
Prep Initial Wt./Vol.: 1.058 g  
Prep Extract Vol: 50 mL

## Results of 21-MTR-07

Client Sample ID: **21-MTR-07**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690007  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:28  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.4  
 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	13.3 J	22.5	10.1	mg/kg	1		10/11/21 18:10
<b>Surrogates</b>							
5a Androstane (surr)	85.7	50-150		%	1		10/11/21 18:10

## Batch Information

Analytical Batch: XFC16108  
 Analytical Method: AK102  
 Analyst: IVM  
 Analytical Date/Time: 10/11/21 18:10  
 Container ID: 1216690007-A

Prep Batch: XXX45705  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/21 13:10  
 Prep Initial Wt./Vol.: 30.207 g  
 Prep Extract Vol: 5 mL

## Results of 21-MTR-07

Client Sample ID: **21-MTR-07**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690007  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:28  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.4  
 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	1.76 U	3.51	1.05	mg/kg	1		10/08/21 17:56
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	120	50-150		%	1		10/08/21 17:56

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 17:56  
 Container ID: 1216690007-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:28  
 Prep Initial Wt./Vol.: 49.644 g  
 Prep Extract Vol: 30.7619 mL



Results of 21-MTR-07

Client Sample ID: 21-MTR-07
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690007
Lab Project ID: 1216690

Collection Date: 10/06/21 14:28
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.4
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.



**Results of 21-MTR-07**

Client Sample ID: **21-MTR-07**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690007  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:28  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.4  
 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	140 U	280	86.9	ug/kg	1		10/11/21 18:10
Chloroform	4.21 U	8.41	4.21	ug/kg	1		10/11/21 18:10
Chloromethane	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
cis-1,2-Dichloroethene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
cis-1,3-Dichloropropene	8.75 U	17.5	5.47	ug/kg	1		10/11/21 18:10
Dibromochloromethane	3.50 U	7.01	2.10	ug/kg	1		10/11/21 18:10
Dibromomethane	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
Dichlorodifluoromethane	70.0 U	140	42.1	ug/kg	1		10/11/21 18:10
Ethylbenzene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
Freon-113	70.0 U	140	43.5	ug/kg	1		10/11/21 18:10
Hexachlorobutadiene	14.0 U	28.0	8.69	ug/kg	1		10/11/21 18:10
Isopropylbenzene (Cumene)	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
Methylene chloride	70.0 U	140	43.5	ug/kg	1		10/11/21 18:10
Methyl-t-butyl ether	70.0 U	140	43.5	ug/kg	1		10/11/21 18:10
Naphthalene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
n-Butylbenzene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
n-Propylbenzene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
o-Xylene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
P & M -Xylene	35.0 U	70.1	21.0	ug/kg	1		10/11/21 18:10
sec-Butylbenzene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
Styrene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
tert-Butylbenzene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
Tetrachloroethene	8.75 U	17.5	5.47	ug/kg	1		10/11/21 18:10
Toluene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
trans-1,2-Dichloroethene	17.6 U	35.1	10.9	ug/kg	1		10/11/21 18:10
trans-1,3-Dichloropropene	8.75 U	17.5	5.47	ug/kg	1		10/11/21 18:10
Trichloroethene	7.00 U	14.0	4.49	ug/kg	1		10/11/21 18:10
Trichlorofluoromethane	35.0 U	70.1	21.0	ug/kg	1		10/11/21 18:10
Vinyl acetate	70.0 U	140	43.5	ug/kg	1		10/11/21 18:10
Vinyl chloride	0.560 U	1.12	0.351	ug/kg	1		10/11/21 18:10
Xylenes (total)	52.5 U	105	32.0	ug/kg	1		10/11/21 18:10
<b>Surrogates</b>							
1,2-Dichloroethane-D4 (surr)	107	71-136		%	1		10/11/21 18:10
4-Bromofluorobenzene (surr)	106	55-151		%	1		10/11/21 18:10
Toluene-d8 (surr)	102	85-116		%	1		10/11/21 18:10

## Results of 21-MTR-07

Client Sample ID: **21-MTR-07**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690007  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:28  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.4  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 18:10  
Container ID: 1216690007-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:28  
Prep Initial Wt./Vol.: 49.644 g  
Prep Extract Vol: 30.7619 mL

## Results of 21-MTR-07

Client Sample ID: **21-MTR-07**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690007  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:28  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.4  
 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	0.0875 U	0.175	0.0435	ug/kg	1		10/15/21 18:14
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	111	55-151		%	1		10/15/21 18:14
Toluene-d8 (surr)	99.3	85-116		%	1		10/15/21 18:14

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 18:14  
 Container ID: 1216690007-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:28  
 Prep Initial Wt./Vol.: 49.644 g  
 Prep Extract Vol: 30.7619 mL



Results of 21-MTR-08

Client Sample ID: 21-MTR-08  
Client Project ID: Everts AirFuel, 5472 MailTrail  
Lab Sample ID: 1216690008  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:33  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.3  
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	15.5	2.14	0.664	mg/kg	100		10/23/21 19:38

Batch Information

Analytical Batch: MMS11361  
Analytical Method: SW6020B  
Analyst: DMM  
Analytical Date/Time: 10/23/21 19:38  
Container ID: 1216690008-A

Prep Batch: MXX34766  
Prep Method: SW3050B  
Prep Date/Time: 10/23/21 10:40  
Prep Initial Wt./Vol.: 1.057 g  
Prep Extract Vol: 50 mL

## Results of 21-MTR-08

Client Sample ID: **21-MTR-08**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690008  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:33  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.3  
 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	20.5 J	22.6	10.2	mg/kg	1		10/11/21 18:20
<b>Surrogates</b>							
5a Androstane (surr)	88	50-150		%	1		10/11/21 18:20

## Batch Information

Analytical Batch: XFC16108  
 Analytical Method: AK102  
 Analyst: IVM  
 Analytical Date/Time: 10/11/21 18:20  
 Container ID: 1216690008-A

Prep Batch: XXX45705  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/21 13:10  
 Prep Initial Wt./Vol.: 30.002 g  
 Prep Extract Vol: 5 mL

## Results of 21-MTR-08

Client Sample ID: **21-MTR-08**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690008  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:33  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.3  
 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	1.74 U	3.47	1.04	mg/kg	1		10/08/21 18:14
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	106	50-150		%	1		10/08/21 18:14

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 18:14  
 Container ID: 1216690008-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:33  
 Prep Initial Wt./Vol.: 50.466 g  
 Prep Extract Vol: 30.9047 mL



Results of 21-MTR-08

Client Sample ID: 21-MTR-08
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690008
Lab Project ID: 1216690

Collection Date: 10/06/21 14:33
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.3
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.



**Results of 21-MTR-08**

Client Sample ID: **21-MTR-08**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690008  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:33  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.3  
 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	139 U	277	86.0	ug/kg	1		10/11/21 18:27
Chloroform	4.16 U	8.32	4.16	ug/kg	1		10/11/21 18:27
Chloromethane	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
cis-1,2-Dichloroethene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
cis-1,3-Dichloropropene	8.65 U	17.3	5.41	ug/kg	1		10/11/21 18:27
Dibromochloromethane	3.47 U	6.94	2.08	ug/kg	1		10/11/21 18:27
Dibromomethane	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
Dichlorodifluoromethane	69.5 U	139	41.6	ug/kg	1		10/11/21 18:27
Ethylbenzene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
Freon-113	69.5 U	139	43.0	ug/kg	1		10/11/21 18:27
Hexachlorobutadiene	13.9 U	27.7	8.60	ug/kg	1		10/11/21 18:27
Isopropylbenzene (Cumene)	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
Methylene chloride	69.5 U	139	43.0	ug/kg	1		10/11/21 18:27
Methyl-t-butyl ether	69.5 U	139	43.0	ug/kg	1		10/11/21 18:27
Naphthalene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
n-Butylbenzene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
n-Propylbenzene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
o-Xylene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
P & M -Xylene	21.5 J	69.4	20.8	ug/kg	1		10/11/21 18:27
sec-Butylbenzene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
Styrene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
tert-Butylbenzene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
Tetrachloroethene	11.1 J	17.3	5.41	ug/kg	1		10/11/21 18:27
Toluene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
trans-1,2-Dichloroethene	17.4 U	34.7	10.8	ug/kg	1		10/11/21 18:27
trans-1,3-Dichloropropene	8.65 U	17.3	5.41	ug/kg	1		10/11/21 18:27
Trichloroethene	6.95 U	13.9	4.44	ug/kg	1		10/11/21 18:27
Trichlorofluoromethane	136	69.4	20.8	ug/kg	1		10/11/21 18:27
Vinyl acetate	69.5 U	139	43.0	ug/kg	1		10/11/21 18:27
Vinyl chloride	0.555 U	1.11	0.347	ug/kg	1		10/11/21 18:27
Xylenes (total)	52.0 U	104	31.6	ug/kg	1		10/11/21 18:27
<b>Surrogates</b>							
1,2-Dichloroethane-D4 (surr)	106	71-136		%	1		10/11/21 18:27
4-Bromofluorobenzene (surr)	89.3	55-151		%	1		10/11/21 18:27
Toluene-d8 (surr)	102	85-116		%	1		10/11/21 18:27

## Results of 21-MTR-08

Client Sample ID: **21-MTR-08**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690008  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:33  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.3  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 18:27  
Container ID: 1216690008-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:33  
Prep Initial Wt./Vol.: 50.466 g  
Prep Extract Vol: 30.9047 mL

## Results of 21-MTR-08

Client Sample ID: **21-MTR-08**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690008  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:33  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.3  
 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	0.0865 U	0.173	0.0430	ug/kg	1		10/15/21 18:29
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	97.3	55-151		%	1		10/15/21 18:29
Toluene-d8 (surr)	99.2	85-116		%	1		10/15/21 18:29

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 18:29  
 Container ID: 1216690008-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:33  
 Prep Initial Wt./Vol.: 50.466 g  
 Prep Extract Vol: 30.9047 mL



**Results of 21-MTR-09**

Client Sample ID: **21-MTR-09**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690009  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:38  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):90.0  
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	24.6	2.08	0.645	mg/kg	100		10/23/21 19:42

**Batch Information**

Analytical Batch: MMS11361  
Analytical Method: SW6020B  
Analyst: DMM  
Analytical Date/Time: 10/23/21 19:42  
Container ID: 1216690009-A

Prep Batch: MXX34766  
Prep Method: SW3050B  
Prep Date/Time: 10/23/21 10:40  
Prep Initial Wt./Vol.: 1.068 g  
Prep Extract Vol: 50 mL



**Results of 21-MTR-09**

Client Sample ID: **21-MTR-09**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690009  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:38  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):90.0  
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	19.5 J	22.1	9.96	mg/kg	1		10/11/21 18:30
<b>Surrogates</b>							
5a Androstane (surr)	98	50-150		%	1		10/11/21 18:30

**Batch Information**

Analytical Batch: XFC16108  
Analytical Method: AK102  
Analyst: IVM  
Analytical Date/Time: 10/11/21 18:30  
Container ID: 1216690009-A

Prep Batch: XXX45705  
Prep Method: SW3550C  
Prep Date/Time: 10/10/21 13:10  
Prep Initial Wt./Vol.: 30.123 g  
Prep Extract Vol: 5 mL

## Results of 21-MTR-09

Client Sample ID: **21-MTR-09**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690009  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:38  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):90.0  
 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	1.65 U	3.29	0.988	mg/kg	1		10/08/21 18:32
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	130	50-150		%	1		10/08/21 18:32

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 18:32  
 Container ID: 1216690009-B

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:38  
 Prep Initial Wt./Vol.: 50.793 g  
 Prep Extract Vol: 30.0971 mL



Results of 21-MTR-09

Client Sample ID: 21-MTR-09
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690009
Lab Project ID: 1216690

Collection Date: 10/06/21 14:38
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):90.0
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.



Results of 21-MTR-09

Client Sample ID: 21-MTR-09
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690009
Lab Project ID: 1216690

Collection Date: 10/06/21 14:38
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):90.0
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.

## Results of 21-MTR-09

Client Sample ID: **21-MTR-09**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690009  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:38  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):90.0  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 18:43  
Container ID: 1216690009-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:38  
Prep Initial Wt./Vol.: 50.793 g  
Prep Extract Vol: 30.0971 mL

## Results of 21-MTR-09

Client Sample ID: **21-MTR-09**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690009  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:38  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):90.0  
 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	0.0825 U	0.165	0.0408	ug/kg	1		10/15/21 18:44
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	119	55-151		%	1		10/15/21 18:44
Toluene-d8 (surr)	101	85-116		%	1		10/15/21 18:44

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 18:44  
 Container ID: 1216690009-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:38  
 Prep Initial Wt./Vol.: 50.793 g  
 Prep Extract Vol: 30.0971 mL



**Results of 21-MTR-10**

Client Sample ID: **21-MTR-10**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690010  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:43  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.6  
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	6.66	2.13	0.659	mg/kg	100		10/23/21 19:46

**Batch Information**

Analytical Batch: MMS11361  
Analytical Method: SW6020B  
Analyst: DMM  
Analytical Date/Time: 10/23/21 19:46  
Container ID: 1216690010-A

Prep Batch: MXX34766  
Prep Method: SW3050B  
Prep Date/Time: 10/23/21 10:40  
Prep Initial Wt./Vol.: 1.062 g  
Prep Extract Vol: 50 mL



**Results of 21-MTR-10**

Client Sample ID: **21-MTR-10**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690010  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:43  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.6  
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	11.3 U	22.5	10.1	mg/kg	1		10/11/21 18:39
<b>Surrogates</b>							
5a Androstane (surr)	85.2	50-150		%	1		10/11/21 18:39

**Batch Information**

Analytical Batch: XFC16108  
Analytical Method: AK102  
Analyst: IVM  
Analytical Date/Time: 10/11/21 18:39  
Container ID: 1216690010-A

Prep Batch: XXX45705  
Prep Method: SW3550C  
Prep Date/Time: 10/10/21 13:10  
Prep Initial Wt./Vol.: 30.109 g  
Prep Extract Vol: 5 mL



Results of 21-MTR-10

Client Sample ID: 21-MTR-10
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690010
Lab Project ID: 1216690

Collection Date: 10/06/21 14:43
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.6
Location:

Results by Volatile Fuels

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Gasoline Range Organics and 4-Bromofluorobenzene (surr).

Batch Information

Analytical Batch: VFC15880
Analytical Method: AK101
Analyst: IJV
Analytical Date/Time: 10/08/21 18:50
Container ID: 1216690010-B

Prep Batch: VXX37995
Prep Method: SW5035A
Prep Date/Time: 10/06/21 14:43
Prep Initial Wt./Vol.: 50.305 g
Prep Extract Vol: 30.7307 mL



Results of 21-MTR-10

Client Sample ID: 21-MTR-10
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690010
Lab Project ID: 1216690

Collection Date: 10/06/21 14:43
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.6
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.



Results of 21-MTR-10

Client Sample ID: 21-MTR-10
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690010
Lab Project ID: 1216690

Collection Date: 10/06/21 14:43
Received Date: 10/08/21 09:30
Matrix: Soil/Solid (dry weight)
Solids (%):88.6
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.

## Results of 21-MTR-10

Client Sample ID: **21-MTR-10**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690010  
Lab Project ID: 1216690

Collection Date: 10/06/21 14:43  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):88.6  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 19:00  
Container ID: 1216690010-B

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 14:43  
Prep Initial Wt./Vol.: 50.305 g  
Prep Extract Vol: 30.7307 mL

## Results of 21-MTR-10

Client Sample ID: **21-MTR-10**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690010  
 Lab Project ID: 1216690

Collection Date: 10/06/21 14:43  
 Received Date: 10/08/21 09:30  
 Matrix: Soil/Solid (dry weight)  
 Solids (%):88.6  
 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	0.0860 U	0.172	0.0427	ug/kg	1		10/15/21 18:59
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	119	55-151		%	1		10/15/21 18:59
Toluene-d8 (surr)	100	85-116		%	1		10/15/21 18:59

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 18:59  
 Container ID: 1216690010-B

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 14:43  
 Prep Initial Wt./Vol.: 50.305 g  
 Prep Extract Vol: 30.7307 mL

## Results of Trip Blank

Client Sample ID: **Trip Blank**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690011  
 Lab Project ID: 1216690

Collection Date: 10/06/21 08:00  
 Received Date: 10/08/21 09:30  
 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	1.25 U	2.50	0.750	mg/kg	1		10/08/21 14:19
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	116	50-150		%	1		10/08/21 14:19

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Analyst: IJV  
 Analytical Date/Time: 10/08/21 14:19  
 Container ID: 1216690011-A

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 08:00  
 Prep Initial Wt./Vol.: 50 g  
 Prep Extract Vol: 25 mL



### Results of Trip Blank

Client Sample ID: **Trip Blank**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690011  
 Lab Project ID: 1216690

Collection Date: 10/06/21 08:00  
 Received Date: 10/08/21 09:30  
 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>
1,1,1,2-Tetrachloroethane	10.0 U	20.0	6.20	ug/kg	1		10/11/21 15:47
1,1,1-Trichloroethane	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,1,2,2-Tetrachloroethane	1.00 U	2.00	0.620	ug/kg	1		10/11/21 15:47
1,1,2-Trichloroethane	0.500 U	1.00	0.500	ug/kg	1		10/11/21 15:47
1,1-Dichloroethane	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,1-Dichloroethene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,1-Dichloropropene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,2,3-Trichlorobenzene	50.0 U	100	30.0	ug/kg	1		10/11/21 15:47
1,2,3-Trichloropropane	1.00 U	2.00	0.620	ug/kg	1		10/11/21 15:47
1,2,4-Trichlorobenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,2,4-Trimethylbenzene	50.0 U	100	30.0	ug/kg	1		10/11/21 15:47
1,2-Dibromo-3-chloropropane	50.0 U	100	31.0	ug/kg	1		10/11/21 15:47
1,2-Dibromoethane	0.750 U	1.50	0.750	ug/kg	1		10/11/21 15:47
1,2-Dichlorobenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,2-Dichloroethane	1.00 U	2.00	0.700	ug/kg	1		10/11/21 15:47
1,2-Dichloropropane	5.00 U	10.0	5.00	ug/kg	1		10/11/21 15:47
1,3,5-Trimethylbenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,3-Dichlorobenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
1,3-Dichloropropane	5.00 U	10.0	3.10	ug/kg	1		10/11/21 15:47
1,4-Dichlorobenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
2,2-Dichloropropane	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
2-Butanone (MEK)	125 U	250	78.0	ug/kg	1		10/11/21 15:47
2-Chlorotoluene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
2-Hexanone	60.0 U	120	60.0	ug/kg	1		10/11/21 15:47
4-Chlorotoluene	10.0 U	20.0	10.0	ug/kg	1		10/11/21 15:47
4-Isopropyltoluene	40.0 U	80.0	40.0	ug/kg	1		10/11/21 15:47
4-Methyl-2-pentanone (MIBK)	125 U	250	78.0	ug/kg	1		10/11/21 15:47
Acetone	125 U	250	110	ug/kg	1		10/11/21 15:47
Benzene	6.25 U	12.5	3.90	ug/kg	1		10/11/21 15:47
Bromobenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
Bromochloromethane	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
Bromodichloromethane	1.00 U	2.00	0.620	ug/kg	1		10/11/21 15:47
Bromoform	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47
Bromomethane	10.0 U	20.0	8.00	ug/kg	1		10/11/21 15:47
Carbon disulfide	50.0 U	100	31.0	ug/kg	1		10/11/21 15:47
Carbon tetrachloride	6.25 U	12.5	3.90	ug/kg	1		10/11/21 15:47
Chlorobenzene	12.5 U	25.0	7.80	ug/kg	1		10/11/21 15:47



Results of Trip Blank

Client Sample ID: Trip Blank
Client Project ID: Everts AirFuel, 5472 MailTrail
Lab Sample ID: 1216690011
Lab Project ID: 1216690

Collection Date: 10/06/21 08:00
Received Date: 10/08/21 09:30
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.

## Results of Trip Blank

Client Sample ID: **Trip Blank**  
Client Project ID: **Everts AirFuel, 5472 MailTrail**  
Lab Sample ID: 1216690011  
Lab Project ID: 1216690

Collection Date: 10/06/21 08:00  
Received Date: 10/08/21 09:30  
Matrix: Soil/Solid (dry weight)  
Solids (%):  
Location:

## Results by Volatile GC/MS

### Batch Information

Analytical Batch: VMS21264  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 10/11/21 15:47  
Container ID: 1216690011-A

Prep Batch: VXX38000  
Prep Method: SW5035A  
Prep Date/Time: 10/06/21 08:00  
Prep Initial Wt./Vol.: 50 g  
Prep Extract Vol: 25 mL

## Results of Trip Blank

Client Sample ID: **Trip Blank**  
 Client Project ID: **Everts AirFuel, 5472 MailTrail**  
 Lab Sample ID: 1216690011  
 Lab Project ID: 1216690

Collection Date: 10/06/21 08:00  
 Received Date: 10/08/21 09:30  
 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	0.0625 U	0.125	0.0310	ug/kg	1		10/15/21 16:12
<b>Surrogates</b>							
4-Bromofluorobenzene (surr)	114	55-151		%	1		10/15/21 16:12
Toluene-d8 (surr)	99.5	85-116		%	1		10/15/21 16:12

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Analyst: JMG  
 Analytical Date/Time: 10/15/21 16:12  
 Container ID: 1216690011-A

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/06/21 08:00  
 Prep Initial Wt./Vol.: 50 g  
 Prep Extract Vol: 25 mL

## Method Blank

Blank ID: MB for HBN 1827231 [MXX/34742]  
Blank Lab ID: 1642560

Matrix: Soil/Solid (dry weight)

QC for Samples:  
1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006

## Results by SW6020B

<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: MMS11349  
Analytical Method: SW6020B  
Instrument: Perkin Elmer Nexlon P5  
Analyst: ACF  
Analytical Date/Time: 10/17/2021 4:41:00PM

Prep Batch: MXX34742  
Prep Method: SW3050B  
Prep Date/Time: 10/17/2021 8:35:21AM  
Prep Initial Wt./Vol.: 1 g  
Prep Extract Vol: 50 mL

Print Date: 10/25/2021 8:48:10AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [MXX34742]

Blank Spike Lab ID: 1642561

Date Analyzed: 10/17/2021 16:46

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006

## Results by SW6020B

Parameter	Blank Spike (mg/kg)			CL
	Spike	Result	Rec (%)	
Lead	50	50.8	102	( 84-118 )

## Batch Information

Analytical Batch: MMS11349

Analytical Method: SW6020B

Instrument: Perkin Elmer Nexlon P5

Analyst: ACF

Prep Batch: MXX34742

Prep Method: SW3050B

Prep Date/Time: 10/17/2021 08:35

Spike Init Wt./Vol.: 50 mg/kg Extract Vol: 50 mL

Dupe Init Wt./Vol.: Extract Vol:

## Matrix Spike Summary

Original Sample ID: 1642562  
 MS Sample ID: 1642563 MS  
 MSD Sample ID: 1642564 MSD

Analysis Date: 10/17/2021 16:50  
 Analysis Date: 10/17/2021 16:54  
 Analysis Date: 10/17/2021 16:58  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006

## Results by SW6020B

Parameter	Sample	Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Lead	6.72	48.0	54.8	100	47.1	51.7	96	84-118	5.76	(< 20 )

## Batch Information

Analytical Batch: MMS11349  
 Analytical Method: SW6020B  
 Instrument: Perkin Elmer Nexlon P5  
 Analyst: ACF  
 Analytical Date/Time: 10/17/2021 4:54:00PM

Prep Batch: MXX34742  
 Prep Method: Soils/Solids Digest for Metals by ICP-MS  
 Prep Date/Time: 10/17/2021 8:35:21AM  
 Prep Initial Wt./Vol.: 1.04g  
 Prep Extract Vol: 50.00mL

## Method Blank

Blank ID: MB for HBN 1827623 [MXX/34766]

Blank Lab ID: 1643944

QC for Samples:

1216690007, 1216690008, 1216690009, 1216690010

Matrix: Soil/Solid (dry weight)

## Results by SW6020B

<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: MMS11361

Analytical Method: SW6020B

Instrument: Perkin Elmer Nexlon P5

Analyst: DMM

Analytical Date/Time: 10/23/2021 6:42:42PM

Prep Batch: MXX34766

Prep Method: SW3050B

Prep Date/Time: 10/23/2021 10:40:07AM

Prep Initial Wt./Vol.: 1 g

Prep Extract Vol: 50 mL

Print Date: 10/25/2021 8:48:16AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [MXX34766]

Blank Spike Lab ID: 1643945

Date Analyzed: 10/23/2021 18:46

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690007, 1216690008, 1216690009, 1216690010

## Results by SW6020B

Parameter	Blank Spike (mg/kg)			CL
	Spike	Result	Rec (%)	
Lead	50	56.6	113	( 84-118 )

## Batch Information

Analytical Batch: **MMS11361**

Analytical Method: **SW6020B**

Instrument: **Perkin Elmer Nexlon P5**

Analyst: **DMM**

Prep Batch: **MXX34766**

Prep Method: **SW3050B**

Prep Date/Time: **10/23/2021 10:40**

Spike Init Wt./Vol.: 50 mg/kg Extract Vol: 50 mL

Dupe Init Wt./Vol.: Extract Vol:



### Matrix Spike Summary

Original Sample ID: 1643946  
MS Sample ID: 1643947 MS  
MSD Sample ID: 1643948 MSD

Analysis Date: 10/23/2021 18:51  
Analysis Date: 10/23/2021 18:55  
Analysis Date: 10/23/2021 18:59  
Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690007, 1216690008, 1216690009, 1216690010

### Results by SW6020B

Parameter	Sample	Matrix Spike (mg/kg)			Spike Duplicate (mg/kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Lead	3.34	46.7	53.3	107	46.7	52.6	106	84-118	1.27	(< 20 )

### Batch Information

Analytical Batch: MMS11361  
Analytical Method: SW6020B  
Instrument: Perkin Elmer Nexlon P5  
Analyst: DMM  
Analytical Date/Time: 10/23/2021 6:55:23PM

Prep Batch: MXX34766  
Prep Method: Soils/Solids Digest for Metals by ICP-MS  
Prep Date/Time: 10/23/2021 10:40:07AM  
Prep Initial Wt./Vol.: 1.07g  
Prep Extract Vol: 50.00mL

Print Date: 10/25/2021 8:48:20AM

## Method Blank

Blank ID: MB for HBN 1826793 [SPT/11409]

Matrix: Soil/Solid (dry weight)

Blank Lab ID: 1641220

QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

## Results by SM21 2540G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Solids	99.3			%

## Batch Information

Analytical Batch: SPT11409

Analytical Method: SM21 2540G

Instrument:

Analyst: AKC

Analytical Date/Time: 10/9/2021 4:30:00PM

Print Date: 10/25/2021 8:48:22AM

## Duplicate Sample Summary

Original Sample ID: 1216708001

Analysis Date: 10/09/2021 16:30

Duplicate Sample ID: 1641221

Matrix: Soil/Solid (dry weight)

QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

## 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	92.4	92.5	%	0.20	(< 15 )

## Batch Information

Analytical Batch: SPT11409

Analytical Method: SM21 2540G

Instrument:

Analyst: AKC

Print Date: 10/25/2021 8:48:23AM

## Method Blank

Blank ID: MB for HBN 1826857 [VXX/37995]  
 Blank Lab ID: 1641433

Matrix: Soil/Solid (dry weight)

### QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010, 1216690011

## 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
<b>Surrogates</b>				
4-Bromofluorobenzene (surr)	97.7	50-150		%

## Batch Information

Analytical Batch: VFC15880  
 Analytical Method: AK101  
 Instrument: Agilent 7890 PID/FID  
 Analyst: IJV  
 Analytical Date/Time: 10/8/2021 12:08:00PM

Prep Batch: VXX37995  
 Prep Method: SW5035A  
 Prep Date/Time: 10/8/2021 6:00:00AM  
 Prep Initial Wt./Vol.: 50 g  
 Prep Extract Vol: 25 mL

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX37995]  
 Blank Spike Lab ID: 1641434  
 Date Analyzed: 10/08/2021 11:31

Spike Duplicate ID: LCSD for HBN 1216690 [VXX37995]  
 Spike Duplicate Lab ID: 1641435  
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010, 1216690011

## 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	12.9	103	12.5	12.5	100	( 60-120 )	3.00	(< 20 )

### Surrogates

4-Bromofluorobenzene (surr)	1.25		123	1.25		117	( 50-150 )	5.00	
-----------------------------	------	--	-----	------	--	-----	------------	------	--

## Batch Information

Analytical Batch: **VFC15880**  
 Analytical Method: **AK101**  
 Instrument: **Agilent 7890 PID/FID**  
 Analyst: **IJV**

Prep Batch: **VXX37995**  
 Prep Method: **SW5035A**  
 Prep Date/Time: **10/08/2021 06:00**  
 Spike Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 12.5 mg/Kg Extract Vol: 25 mL



### Method Blank

Blank ID: MB for HBN 1826860 [VXX/37996]

Matrix: Soil/Solid (dry weight)

Blank Lab ID: 1641449

QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

### Results by SW8260D

<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	0.500U	1.00	0.500	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	50.0U	100	30.0	ug/kg
1,2,3-Trichloropropane	1.00U	2.00	0.620	ug/kg
1,2,4-Trichlorobenzene	12.5U	25.0	7.80	ug/kg
1,2,4-Trimethylbenzene	50.0U	100	30.0	ug/kg
1,2-Dibromo-3-chloropropane	50.0U	100	31.0	ug/kg
1,2-Dibromoethane	0.750U	1.50	0.750	ug/kg
1,2-Dichlorobenzene	12.5U	25.0	7.80	ug/kg
1,2-Dichloroethane	1.00U	2.00	0.700	ug/kg
1,2-Dichloropropane	5.00U	10.0	5.00	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	60.0U	120	60.0	ug/kg
4-Chlorotoluene	10.0U	20.0	10.0	ug/kg
4-Isopropyltoluene	40.0U	80.0	40.0	ug/kg
4-Methyl-2-pentanone (MIBK)	125U	250	78.0	ug/kg
Acetone	125U	250	110	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	8.00	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: 10/25/2021 8:48:30AM



### Method Blank

Blank ID: MB for HBN 1826860 [VXX/37996]

Matrix: Soil/Solid (dry weight)

Blank Lab ID: 1641449

QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

### Results by SW8260D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Chloroform	3.00U	6.00	3.00	ug/kg
Chloromethane	12.5U	25.0	7.80	ug/kg
cis-1,2-Dichloroethene	12.5U	25.0	7.80	ug/kg
cis-1,3-Dichloropropene	6.25U	12.5	3.90	ug/kg
Dibromochloromethane	2.50U	5.00	1.50	ug/kg
Dibromomethane	12.5U	25.0	7.80	ug/kg
Dichlorodifluoromethane	50.0U	100	30.0	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	5.00U	10.0	3.20	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
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	103	71-136		%
4-Bromofluorobenzene (surr)	97	55-151		%
Toluene-d8 (surr)	100	85-116		%

Print Date: 10/25/2021 8:48:30AM



**Method Blank**

Blank ID: MB for HBN 1826860 [VXX/37996]  
Blank Lab ID: 1641449

Matrix: Soil/Solid (dry weight)

QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

**Results by SW8260D**

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
------------------	----------------	---------------	-----------	--------------

**Batch Information**

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Instrument: VQA 7890/5975 GC/MS  
Analyst: S.S  
Analytical Date/Time: 10/11/2021 12:24:00PM

Prep Batch: VXX37996  
Prep Method: SW5035A  
Prep Date/Time: 10/11/2021 6:00:00AM  
Prep Initial Wt./Vol.: 50 g  
Prep Extract Vol: 25 mL

Print Date: 10/25/2021 8:48:30AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX37996]

Blank Spike Lab ID: 1641450

Date Analyzed: 10/11/2021 12:40

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007,  
1216690008, 1216690009, 1216690010

## Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
1,1,1,2-Tetrachloroethane	750	788	105	(78-125)
1,1,1-Trichloroethane	750	695	93	(73-130)
1,1,2,2-Tetrachloroethane	750	886	118	(70-124)
1,1,2-Trichloroethane	750	805	107	(78-121)
1,1-Dichloroethane	750	732	98	(76-125)
1,1-Dichloroethene	750	688	92	(70-131)
1,1-Dichloropropene	750	730	97	(76-125)
1,2,3-Trichlorobenzene	750	809	108	(66-130)
1,2,3-Trichloropropane	750	832	111	(73-125)
1,2,4-Trichlorobenzene	750	835	111	(67-129)
1,2,4-Trimethylbenzene	750	850	113	(75-123)
1,2-Dibromo-3-chloropropane	750	770	103	(61-132)
1,2-Dibromoethane	750	861	115	(78-122)
1,2-Dichlorobenzene	750	800	107	(78-121)
1,2-Dichloroethane	750	712	95	(73-128)
1,2-Dichloropropane	750	812	108	(76-123)
1,3,5-Trimethylbenzene	750	849	113	(73-124)
1,3-Dichlorobenzene	750	810	108	(77-121)
1,3-Dichloropropane	750	853	114	(77-121)
1,4-Dichlorobenzene	750	809	108	(75-120)
2,2-Dichloropropane	750	751	100	(67-133)
2-Butanone (MEK)	2250	2280	101	(51-148)
2-Chlorotoluene	750	834	111	(75-122)
2-Hexanone	2250	2610	116	(53-145)
4-Chlorotoluene	750	842	112	(72-124)
4-Isopropyltoluene	750	901	120	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2380	106	(65-135)
Acetone	2250	2410	107	(36-164)
Benzene	750	777	104	(77-121)
Bromobenzene	750	830	111	(78-121)
Bromochloromethane	750	722	96	(78-125)
Bromodichloromethane	750	751	100	(75-127)
Bromoform	750	764	102	(67-132)
Bromomethane	750	782	104	(53-143)

Print Date: 10/25/2021 8:48:33AM



### Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX37996]

Blank Spike Lab ID: 1641450

Date Analyzed: 10/11/2021 12:40

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

### Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
Carbon disulfide	1130	1190	106	( 63-132 )
Carbon tetrachloride	750	667	89	( 70-135 )
Chlorobenzene	750	771	103	( 79-120 )
Chloroethane	750	804	107	( 59-139 )
Chloroform	750	742	99	( 78-123 )
Chloromethane	750	789	105	( 50-136 )
cis-1,2-Dichloroethene	750	722	96	( 77-123 )
cis-1,3-Dichloropropene	750	843	112	( 74-126 )
Dibromochloromethane	750	842	112	( 74-126 )
Dibromomethane	750	755	101	( 78-125 )
Dichlorodifluoromethane	750	717	96	( 29-149 )
Ethylbenzene	750	747	100	( 76-122 )
Freon-113	1130	950	84	( 66-136 )
Hexachlorobutadiene	750	840	112	( 61-135 )
Isopropylbenzene (Cumene)	750	782	104	( 68-134 )
Methylene chloride	750	783	104	( 70-128 )
Methyl-t-butyl ether	1130	1160	103	( 73-125 )
Naphthalene	750	775	103	( 62-129 )
n-Butylbenzene	750	926	123	( 70-128 )
n-Propylbenzene	750	874	117	( 73-125 )
o-Xylene	750	782	104	( 77-123 )
P & M -Xylene	1500	1470	98	( 77-124 )
sec-Butylbenzene	750	891	119	( 73-126 )
Styrene	750	797	106	( 76-124 )
tert-Butylbenzene	750	873	116	( 73-125 )
Tetrachloroethene	750	736	98	( 73-128 )
Toluene	750	781	104	( 77-121 )
trans-1,2-Dichloroethene	750	717	96	( 74-125 )
trans-1,3-Dichloropropene	750	805	107	( 71-130 )
Trichloroethene	750	763	102	( 77-123 )
Trichlorofluoromethane	750	832	111	( 62-140 )
Vinyl acetate	750	868	116	( 50-151 )
Vinyl chloride	750	777	104	( 56-135 )
Xylenes (total)	2250	2250	100	( 78-124 )

Print Date: 10/25/2021 8:48:33AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX37996]

Blank Spike Lab ID: 1641450

Date Analyzed: 10/11/2021 12:40

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007,  
1216690008, 1216690009, 1216690010

## Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	750	94		( 71-136 )
4-Bromofluorobenzene (surr)	750	100		( 55-151 )
Toluene-d8 (surr)	750	103		( 85-116 )

## Batch Information

Analytical Batch: **VMS21261**

Analytical Method: **SW8260D**

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

Analyst: **S.S**

Prep Batch: **VXX37996**

Prep Method: **SW5035A**

Prep Date/Time: **10/11/2021 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: 1641454  
 MS Sample ID: 1641457 MS  
 MSD Sample ID: 1641458 MSD

Analysis Date: 10/11/2021 15:25  
 Analysis Date: 10/11/2021 14:02  
 Analysis Date: 10/11/2021 14:19  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

## Results by SW8260D

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	10.1U	753	804	107	753	795	106	78-125	1.10	(< 20)
1,1,1-Trichloroethane	12.6U	753	691	92	753	681	90	73-130	1.40	(< 20)
1,1,2,2-Tetrachloroethane	1.00U	753	866	115	753	856	114	70-124	1.20	(< 20)
1,1,2-Trichloroethane	0.500U	753	824	109	753	822	109	78-121	0.15	(< 20)
1,1-Dichloroethane	12.6U	753	718	95	753	717	95	76-125	0.24	(< 20)
1,1-Dichloroethene	12.6U	753	670	89	753	663	88	70-131	1.10	(< 20)
1,1-Dichloropropene	12.6U	753	734	98	753	722	96	76-125	1.70	(< 20)
1,2,3-Trichlorobenzene	50.0U	753	938	125	753	1100	146 *	66-130	16.00	(< 20)
1,2,3-Trichloropropane	1.00U	753	798	106	753	794	105	73-125	0.54	(< 20)
1,2,4-Trichlorobenzene	12.6U	753	939	125	753	1000	133 *	67-129	6.70	(< 20)
1,2,4-Trimethylbenzene	50.0U	753	826	110	753	802	106	75-123	3.10	(< 20)
1,2-Dibromo-3-chloropropane	50.0U	753	785	104	753	793	105	61-132	1.10	(< 20)
1,2-Dibromoethane	0.755U	753	871	116	753	869	115	78-122	0.26	(< 20)
1,2-Dichlorobenzene	12.6U	753	816	108	753	802	106	78-121	1.80	(< 20)
1,2-Dichloroethane	1.00U	753	702	93	753	705	94	73-128	0.46	(< 20)
1,2-Dichloropropane	5.00U	753	806	107	753	802	107	76-123	0.50	(< 20)
1,3,5-Trimethylbenzene	12.6U	753	819	109	753	786	104	73-124	4.10	(< 20)
1,3-Dichlorobenzene	12.6U	753	801	106	753	787	105	77-121	1.70	(< 20)
1,3-Dichloropropane	5.00U	753	867	115	753	869	115	77-121	0.23	(< 20)
1,4-Dichlorobenzene	12.6U	753	806	107	753	799	106	75-120	0.84	(< 20)
2,2-Dichloropropane	12.6U	753	736	98	753	726	96	67-133	1.40	(< 20)
2-Butanone (MEK)	126U	2260	2210	98	2260	2230	99	51-148	0.88	(< 20)
2-Chlorotoluene	12.6U	753	819	109	753	790	105	75-122	3.60	(< 20)
2-Hexanone	60.0U	2260	2610	115	2260	2620	116	53-145	0.40	(< 20)
4-Chlorotoluene	10.1U	753	802	106	753	787	104	72-124	1.90	(< 20)
4-Isopropyltoluene	40.1U	753	859	114	753	830	110	73-127	3.40	(< 20)
4-Methyl-2-pentanone (MIBK)	126U	2260	2360	104	2260	2400	106	65-135	1.70	(< 20)
Acetone	126U	2260	2320	103	2260	2330	103	36-164	0.42	(< 20)
Benzene	6.30U	753	777	103	753	767	102	77-121	1.20	(< 20)
Bromobenzene	12.6U	753	798	106	753	786	104	78-121	1.50	(< 20)
Bromochloromethane	12.6U	753	714	95	753	721	96	78-125	1.00	(< 20)
Bromodichloromethane	1.00U	753	749	99	753	750	100	75-127	0.17	(< 20)
Bromoform	12.6U	753	782	104	753	782	104	67-132	0.03	(< 20)
Bromomethane	10.1U	753	749	100	753	760	101	53-143	1.40	(< 20)
Carbon disulfide	50.0U	1130	1100	97	1130	1090	96	63-132	1.00	(< 20)
Carbon tetrachloride	6.30U	753	670	89	753	661	88	70-135	1.30	(< 20)
Chlorobenzene	12.6U	753	781	104	753	775	103	79-120	0.77	(< 20)

Print Date: 10/25/2021 8:48:34AM



### Matrix Spike Summary

Original Sample ID: 1641454  
 MS Sample ID: 1641457 MS  
 MSD Sample ID: 1641458 MSD

Analysis Date: 10/11/2021 15:25  
 Analysis Date: 10/11/2021 14:02  
 Analysis Date: 10/11/2021 14:19  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

### Results by SW8260D

Parameter	Sample	Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Chloroethane	101U	753	775	103	753	759	101	59-139	2.00	(< 20)
Chloroform	3.01U	753	736	98	753	735	98	78-123	0.14	(< 20)
Chloromethane	12.6U	753	694	92	753	699	93	50-136	0.69	(< 20)
cis-1,2-Dichloroethene	12.6U	753	746	99	753	704	93	77-123	5.80	(< 20)
cis-1,3-Dichloropropene	6.30U	753	835	111	753	835	111	74-126	0.09	(< 20)
Dibromochloromethane	2.51U	753	854	113	753	854	113	74-126	0.03	(< 20)
Dibromomethane	12.6U	753	749	99	753	759	101	78-125	1.30	(< 20)
Dichlorodifluoromethane	50.0U	753	560	74	753	550	73	29-149	1.70	(< 20)
Ethylbenzene	12.6U	753	754	100	753	748	99	76-122	0.84	(< 20)
Freon-113	50.0U	1130	975	86	1130	958	85	66-136	1.80	(< 20)
Hexachlorobutadiene	10.1U	753	962	128	753	1010	135	61-135	5.20	(< 20)
Isopropylbenzene (Cumene)	12.6U	753	786	104	753	773	103	68-134	1.70	(< 20)
Methylene chloride	50.0U	753	752	100	753	763	101	70-128	1.40	(< 20)
Methyl-t-butyl ether	50.0U	1130	1110	98	1130	1140	101	73-125	2.70	(< 20)
Naphthalene	12.6U	753	866	115	753	971	129	62-129	11.50	(< 20)
n-Butylbenzene	12.6U	753	892	118	753	866	115	70-128	2.90	(< 20)
n-Propylbenzene	12.6U	753	827	110	753	793	105	73-125	4.20	(< 20)
o-Xylene	12.6U	753	786	104	753	779	103	77-123	0.93	(< 20)
P & M -Xylene	25.1U	1510	1480	98	1510	1480	98	77-124	0.12	(< 20)
sec-Butylbenzene	12.6U	753	837	111	753	812	108	73-126	3.10	(< 20)
Styrene	12.6U	753	807	107	753	801	106	76-124	0.72	(< 20)
tert-Butylbenzene	12.6U	753	831	110	753	802	106	73-125	3.50	(< 20)
Tetrachloroethene	6.30U	753	752	100	753	736	98	73-128	2.10	(< 20)
Toluene	12.6U	753	795	106	753	786	104	77-121	1.10	(< 20)
trans-1,2-Dichloroethene	12.6U	753	711	94	753	716	95	74-125	0.70	(< 20)
trans-1,3-Dichloropropene	6.30U	753	815	108	753	811	108	71-130	0.40	(< 20)
Trichloroethene	5.00U	753	762	101	753	752	100	77-123	1.40	(< 20)
Trichlorofluoromethane	25.1U	753	853	113	753	823	109	62-140	3.70	(< 20)
Vinyl acetate	50.0U	753	851	113	753	858	114	50-151	0.85	(< 20)
Vinyl chloride	0.402U	753	713	95	753	707	94	56-135	0.92	(< 20)
Xylenes (total)	37.6U	2260	2270	100	2260	2260	100	78-124	0.40	(< 20)
<b>Surrogates</b>										
1,2-Dichloroethane-D4 (surr)		753	712	95	753	700	93	71-136	1.70	
4-Bromofluorobenzene (surr)		1260	942	75	1260	916	73	55-151	2.80	
Toluene-d8 (surr)		753	776	103	753	773	103	85-116	0.39	

Print Date: 10/25/2021 8:48:34AM



### Matrix Spike Summary

Original Sample ID: 1641454  
MS Sample ID: 1641457 MS  
MSD Sample ID: 1641458 MSD

Analysis Date:  
Analysis Date: 10/11/2021 14:02  
Analysis Date: 10/11/2021 14:19  
Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

### Results by SW8260D

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

### Batch Information

Analytical Batch: VMS21261  
Analytical Method: SW8260D  
Instrument: VQA 7890/5975 GC/MS  
Analyst: S.S  
Analytical Date/Time: 10/11/2021 2:02:00PM

Prep Batch: VXX37996  
Prep Method: Vol. Extraction SW8260 Field Extracted L  
Prep Date/Time: 10/11/2021 6:00:00AM  
Prep Initial Wt./Vol.: 49.80g  
Prep Extract Vol: 25.00mL

Print Date: 10/25/2021 8:48:34AM



### Method Blank

Blank ID: MB for HBN 1826873 [VXX/38000]

Blank Lab ID: 1641508

QC for Samples:

1216690011

Matrix: Soil/Solid (dry weight)

### Results by SW8260D

<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	0.500U	1.00	0.500	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	50.0U	100	30.0	ug/kg
1,2,3-Trichloropropane	1.00U	2.00	0.620	ug/kg
1,2,4-Trichlorobenzene	12.5U	25.0	7.80	ug/kg
1,2,4-Trimethylbenzene	50.0U	100	30.0	ug/kg
1,2-Dibromo-3-chloropropane	50.0U	100	31.0	ug/kg
1,2-Dibromoethane	0.750U	1.50	0.750	ug/kg
1,2-Dichlorobenzene	12.5U	25.0	7.80	ug/kg
1,2-Dichloroethane	1.00U	2.00	0.700	ug/kg
1,2-Dichloropropane	5.00U	10.0	5.00	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	60.0U	120	60.0	ug/kg
4-Chlorotoluene	10.0U	20.0	10.0	ug/kg
4-Isopropyltoluene	40.0U	80.0	40.0	ug/kg
4-Methyl-2-pentanone (MIBK)	125U	250	78.0	ug/kg
Acetone	125U	250	110	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	8.00	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: 10/25/2021 8:48:36AM



### Method Blank

Blank ID: MB for HBN 1826873 [VXX/38000]

Blank Lab ID: 1641508

QC for Samples:

1216690011

Matrix: Soil/Solid (dry weight)

### Results by SW8260D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Chloroform	3.00U	6.00	3.00	ug/kg
Chloromethane	12.5U	25.0	7.80	ug/kg
cis-1,2-Dichloroethene	12.5U	25.0	7.80	ug/kg
cis-1,3-Dichloropropene	6.25U	12.5	3.90	ug/kg
Dibromochloromethane	2.50U	5.00	1.50	ug/kg
Dibromomethane	12.5U	25.0	7.80	ug/kg
Dichlorodifluoromethane	50.0U	100	30.0	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	5.00U	10.0	3.20	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
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	104	71-136		%
4-Bromofluorobenzene (surr)	97.3	55-151		%
Toluene-d8 (surr)	103	85-116		%

Print Date: 10/25/2021 8:48:36AM

## Method Blank

Blank ID: MB for HBN 1826873 [VXX/38000]

Blank Lab ID: 1641508

QC for Samples:  
1216690011

Matrix: Soil/Solid (dry weight)

## Results by SW8260D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
------------------	----------------	---------------	-----------	--------------

### Batch Information

Analytical Batch: VMS21264  
Analytical Method: SW8260D  
Instrument: VRA Agilent GC/MS 7890B/5977A  
Analyst: S.S  
Analytical Date/Time: 10/11/2021 12:23:00PM

Prep Batch: VXX38000  
Prep Method: SW5035A  
Prep Date/Time: 10/11/2021 6:00:00AM  
Prep Initial Wt./Vol.: 50 g  
Prep Extract Vol: 25 mL

Print Date: 10/25/2021 8:48:36AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX38000]

Blank Spike Lab ID: 1641509

Date Analyzed: 10/11/2021 12:38

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690011

## Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
1,1,1,2-Tetrachloroethane	750	889	118	(78-125)
1,1,1-Trichloroethane	750	821	110	(73-130)
1,1,2,2-Tetrachloroethane	750	814	109	(70-124)
1,1,2-Trichloroethane	750	840	112	(78-121)
1,1-Dichloroethane	750	776	103	(76-125)
1,1-Dichloroethene	750	845	113	(70-131)
1,1-Dichloropropene	750	782	104	(76-125)
1,2,3-Trichlorobenzene	750	808	108	(66-130)
1,2,3-Trichloropropane	750	804	107	(73-125)
1,2,4-Trichlorobenzene	750	804	107	(67-129)
1,2,4-Trimethylbenzene	750	829	110	(75-123)
1,2-Dibromo-3-chloropropane	750	822	110	(61-132)
1,2-Dibromoethane	750	865	115	(78-122)
1,2-Dichlorobenzene	750	780	104	(78-121)
1,2-Dichloroethane	750	748	100	(73-128)
1,2-Dichloropropane	750	805	107	(76-123)
1,3,5-Trimethylbenzene	750	816	109	(73-124)
1,3-Dichlorobenzene	750	798	106	(77-121)
1,3-Dichloropropane	750	793	106	(77-121)
1,4-Dichlorobenzene	750	793	106	(75-120)
2,2-Dichloropropane	750	898	120	(67-133)
2-Butanone (MEK)	2250	2540	113	(51-148)
2-Chlorotoluene	750	782	104	(75-122)
2-Hexanone	2250	2600	116	(53-145)
4-Chlorotoluene	750	790	105	(72-124)
4-Isopropyltoluene	750	845	113	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2450	109	(65-135)
Acetone	2250	2830	126	(36-164)
Benzene	750	773	103	(77-121)
Bromobenzene	750	781	104	(78-121)
Bromochloromethane	750	783	104	(78-125)
Bromodichloromethane	750	915	122	(75-127)
Bromoform	750	850	113	(67-132)
Bromomethane	750	808	108	(53-143)

Print Date: 10/25/2021 8:48:39AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX38000]

Blank Spike Lab ID: 1641509

Date Analyzed: 10/11/2021 12:38

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690011

## Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
Carbon disulfide	1130	1440	128	(63-132)
Carbon tetrachloride	750	869	116	(70-135)
Chlorobenzene	750	787	105	(79-120)
Chloroethane	750	894	119	(59-139)
Chloroform	750	766	102	(78-123)
Chloromethane	750	691	92	(50-136)
cis-1,2-Dichloroethene	750	768	102	(77-123)
cis-1,3-Dichloropropene	750	807	108	(74-126)
Dibromochloromethane	750	830	111	(74-126)
Dibromomethane	750	837	112	(78-125)
Dichlorodifluoromethane	750	629	84	(29-149)
Ethylbenzene	750	778	104	(76-122)
Freon-113	1130	1260	112	(66-136)
Hexachlorobutadiene	750	865	115	(61-135)
Isopropylbenzene (Cumene)	750	837	112	(68-134)
Methylene chloride	750	797	106	(70-128)
Methyl-t-butyl ether	1130	1160	103	(73-125)
Naphthalene	750	806	108	(62-129)
n-Butylbenzene	750	866	115	(70-128)
n-Propylbenzene	750	805	107	(73-125)
o-Xylene	750	802	107	(77-123)
P & M -Xylene	1500	1570	104	(77-124)
sec-Butylbenzene	750	840	112	(73-126)
Styrene	750	843	112	(76-124)
tert-Butylbenzene	750	823	110	(73-125)
Tetrachloroethene	750	781	104	(73-128)
Toluene	750	781	104	(77-121)
trans-1,2-Dichloroethene	750	800	107	(74-125)
trans-1,3-Dichloropropene	750	835	111	(71-130)
Trichloroethene	750	798	106	(77-123)
Trichlorofluoromethane	750	873	116	(62-140)
Vinyl acetate	750	823	110	(50-151)
Vinyl chloride	750	775	103	(56-135)
Xylenes (total)	2250	2370	105	(78-124)

Print Date: 10/25/2021 8:48:39AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX38000]  
 Blank Spike Lab ID: 1641509  
 Date Analyzed: 10/11/2021 12:38

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690011

## Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	750		99	( 71-136 )
4-Bromofluorobenzene (surr)	750		90	( 55-151 )
Toluene-d8 (surr)	750		102	( 85-116 )

## Batch Information

Analytical Batch: **VMS21264**  
 Analytical Method: **SW8260D**  
 Instrument: **VRA Agilent GC/MS 7890B/5977A**  
 Analyst: **S.S**

Prep Batch: **VXX38000**  
 Prep Method: **SW5035A**  
 Prep Date/Time: **10/11/2021 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: 1641511  
 MS Sample ID: 1641513 MS  
 MSD Sample ID: 1641514 MSD

Analysis Date: 10/11/2021 16:18  
 Analysis Date: 10/11/2021 13:58  
 Analysis Date: 10/11/2021 14:14  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690011

### Results by SW8260D

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	34.7U	2600	3100	119	2600	3110	119	78-125	0.14	(< 20)
1,1,1-Trichloroethane	43.4U	2600	2910	112	2600	2870	110	73-130	1.60	(< 20)
1,1,2,2-Tetrachloroethane	3.47U	2600	2950	113	2600	2910	112	70-124	1.10	(< 20)
1,1,2-Trichloroethane	1.74U	2600	2950	113	2600	2930	113	78-121	0.68	(< 20)
1,1-Dichloroethane	43.4U	2600	2760	106	2600	2690	103	76-125	2.50	(< 20)
1,1-Dichloroethene	43.4U	2600	2930	113	2600	2840	109	70-131	3.10	(< 20)
1,1-Dichloropropene	43.4U	2600	2770	107	2600	2720	105	76-125	1.80	(< 20)
1,2,3-Trichlorobenzene	174U	2600	2910	112	2600	3140	120	66-130	7.60	(< 20)
1,2,3-Trichloropropane	3.47U	2600	2880	111	2600	2900	111	73-125	0.51	(< 20)
1,2,4-Trichlorobenzene	43.4U	2600	2810	108	2600	2900	111	67-129	3.00	(< 20)
1,2,4-Trimethylbenzene	174U	2600	2790	107	2600	2800	108	75-123	0.62	(< 20)
1,2-Dibromo-3-chloropropane	174U	2600	2980	114	2600	3050	117	61-132	2.20	(< 20)
1,2-Dibromoethane	2.61U	2600	3070	118	2600	3060	118	78-122	0.20	(< 20)
1,2-Dichlorobenzene	43.4U	2600	2610	100	2600	2690	103	78-121	3.10	(< 20)
1,2-Dichloroethane	3.47U	2600	2640	101	2600	2620	101	73-128	0.63	(< 20)
1,2-Dichloropropane	17.4U	2600	2830	109	2600	2770	107	76-123	2.10	(< 20)
1,3,5-Trimethylbenzene	43.4U	2600	2800	108	2600	2820	108	73-124	0.77	(< 20)
1,3-Dichlorobenzene	43.4U	2600	2710	104	2600	2700	104	77-121	0.29	(< 20)
1,3-Dichloropropane	17.4U	2600	2800	108	2600	2840	109	77-121	1.30	(< 20)
1,4-Dichlorobenzene	43.4U	2600	2660	102	2600	2680	103	75-120	0.94	(< 20)
2,2-Dichloropropane	43.4U	2600	3180	122	2600	3120	120	67-133	1.80	(< 20)
2-Butanone (MEK)	434U	7810	8780	112	7810	8680	111	51-148	1.20	(< 20)
2-Chlorotoluene	43.4U	2600	2750	106	2600	2740	105	75-122	0.44	(< 20)
2-Hexanone	209U	7810	9170	117	7810	9170	117	53-145	0.08	(< 20)
4-Chlorotoluene	34.7U	2600	2710	104	2600	2740	105	72-124	0.76	(< 20)
4-Isopropyltoluene	139U	2600	2860	110	2600	2820	108	73-127	1.50	(< 20)
4-Methyl-2-pentanone (MIBK)	434U	7810	8780	112	7810	8610	110	65-135	2.00	(< 20)
Acetone	434U	7810	9750	125	7810	9400	120	36-164	3.60	(< 20)
Benzene	21.7U	2600	2750	106	2600	2700	104	77-121	1.80	(< 20)
Bromobenzene	43.4U	2600	2740	105	2600	2730	105	78-121	0.35	(< 20)
Bromochloromethane	43.4U	2600	2790	107	2600	2740	105	78-125	1.70	(< 20)
Bromodichloromethane	3.47U	2600	3240	124	2600	3190	123	75-127	1.50	(< 20)
Bromoform	43.4U	2600	3000	115	2600	2990	115	67-132	0.12	(< 20)
Bromomethane	34.7U	2600	2810	108	2600	2820	108	53-143	0.56	(< 20)
Carbon disulfide	174U	3900	4920	126	3900	4780	122	63-132	2.90	(< 20)
Carbon tetrachloride	21.7U	2600	3090	119	2600	3040	117	70-135	1.60	(< 20)
Chlorobenzene	43.4U	2600	2750	106	2600	2740	105	79-120	0.25	(< 20)

Print Date: 10/25/2021 8:48:40AM

## Matrix Spike Summary

Original Sample ID: 1641511  
 MS Sample ID: 1641513 MS  
 MSD Sample ID: 1641514 MSD

Analysis Date: 10/11/2021 16:18  
 Analysis Date: 10/11/2021 13:58  
 Analysis Date: 10/11/2021 14:14  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690011

## Results by SW8260D

Parameter	Sample	Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Chloroethane	347U	2600	3380	130	2600	3290	126	59-139	2.90	(< 20)
Chloroform	10.4U	2600	2730	105	2600	2690	103	78-123	1.60	(< 20)
Chloromethane	43.4U	2600	2320	89	2600	2280	88	50-136	1.60	(< 20)
cis-1,2-Dichloroethene	43.4U	2600	2780	107	2600	2740	105	77-123	1.50	(< 20)
cis-1,3-Dichloropropene	21.7U	2600	2860	110	2600	2820	108	74-126	1.60	(< 20)
Dibromochloromethane	8.70U	2600	2930	113	2600	2920	112	74-126	0.53	(< 20)
Dibromomethane	43.4U	2600	2970	114	2600	2930	112	78-125	1.30	(< 20)
Dichlorodifluoromethane	174U	2600	1880	72	2600	1810	69	29-149	4.10	(< 20)
Ethylbenzene	43.4U	2600	2720	104	2600	2720	104	76-122	0.03	(< 20)
Freon-113	174U	3900	4360	112	3900	4220	108	66-136	3.20	(< 20)
Hexachlorobutadiene	34.7U	2600	3700	142 *	2600	3570	137 *	61-135	3.60	(< 20)
Isopropylbenzene (Cumene)	43.4U	2600	2860	110	2600	2840	109	68-134	0.58	(< 20)
Methylene chloride	174U	2600	2800	108	2600	2760	106	70-128	1.50	(< 20)
Methyl-t-butyl ether	174U	3900	4070	104	3900	4040	104	73-125	0.60	(< 20)
Naphthalene	43.4U	2600	2820	109	2600	2980	115	62-129	5.50	(< 20)
n-Butylbenzene	43.4U	2600	2860	110	2600	2890	111	70-128	0.96	(< 20)
n-Propylbenzene	43.4U	2600	2820	108	2600	2790	107	73-125	1.10	(< 20)
o-Xylene	43.4U	2600	2760	106	2600	2750	106	77-123	0.19	(< 20)
P & M -Xylene	87.0U	5210	5510	106	5210	5470	105	77-124	0.84	(< 20)
sec-Butylbenzene	43.4U	2600	2820	108	2600	2780	107	73-126	1.60	(< 20)
Styrene	43.4U	2600	2920	112	2600	2920	112	76-124	0.06	(< 20)
tert-Butylbenzene	43.4U	2600	2800	108	2600	2810	108	73-125	0.28	(< 20)
Tetrachloroethene	21.7U	2600	2720	104	2600	2850	110	73-128	4.80	(< 20)
Toluene	43.4U	2600	2740	105	2600	2730	105	77-121	0.32	(< 20)
trans-1,2-Dichloroethene	43.4U	2600	2650	102	2600	2700	104	74-125	1.90	(< 20)
trans-1,3-Dichloropropene	21.7U	2600	2920	112	2600	2950	113	71-130	1.20	(< 20)
Trichloroethene	17.4U	2600	2820	108	2600	2770	107	77-123	1.70	(< 20)
Trichlorofluoromethane	87.0U	2600	3970	152 *	2600	3790	146 *	62-140	4.60	(< 20)
Vinyl acetate	174U	2600	2890	111	2600	2870	110	50-151	0.60	(< 20)
Vinyl chloride	1.39U	2600	2750	106	2600	2750	106	56-135	0.03	(< 20)
Xylenes (total)	130U	7810	8270	106	7810	8220	105	78-124	0.62	(< 20)
<b>Surrogates</b>										
1,2-Dichloroethane-D4 (surr)		2600	2610	100	2600	2610	100	71-136	0.17	
4-Bromofluorobenzene (surr)		4340	2680	62	4340	2700	62	55-151	0.71	
Toluene-d8 (surr)		2600	2660	102	2600	2680	103	85-116	0.68	

Print Date: 10/25/2021 8:48:40AM

## Matrix Spike Summary

Original Sample ID: 1641511  
 MS Sample ID: 1641513 MS  
 MSD Sample ID: 1641514 MSD

Analysis Date:  
 Analysis Date: 10/11/2021 13:58  
 Analysis Date: 10/11/2021 14:14  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690011

## Results by SW8260D

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

## Batch Information

Analytical Batch: VMS21264  
 Analytical Method: SW8260D  
 Instrument: VRA Agilent GC/MS 7890B/5977A  
 Analyst: S.S  
 Analytical Date/Time: 10/11/2021 1:58:00PM

Prep Batch: VXX38000  
 Prep Method: Vol. Extraction SW8260 Field Extracted L  
 Prep Date/Time: 10/11/2021 6:00:00AM  
 Prep Initial Wt./Vol.: 14.41g  
 Prep Extract Vol: 25.00mL

Print Date: 10/25/2021 8:48:40AM

## Method Blank

Blank ID: MB for HBN 1827280 [VXX/38036]  
 Blank Lab ID: 1642807

Matrix: Solid/Soil (Wet Weight)

### QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010, 1216690011

## Results by SW8260D-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
<b>Surrogates</b>				
4-Bromofluorobenzene (surr)	101	55-151		%
Toluene-d8 (surr)	100	85-116		%

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Instrument: VSA Agilent GC/MS 7890B/5977A  
 Analyst: JMG  
 Analytical Date/Time: 10/15/2021 2:26:00PM

Prep Batch: VXX38036  
 Prep Method: SW5035A  
 Prep Date/Time: 10/15/2021 6:00:00AM  
 Prep Initial Wt./Vol.: 50 g  
 Prep Extract Vol: 25 mL

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX38036]

Blank Spike Lab ID: 1642808

Date Analyzed: 10/15/2021 14:41

Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010, 1216690011

## Results by SW8260D-SIM

### Blank Spike (ug/kg)

Parameter	Spike	Result	Rec (%)	CL
1,2-Dibromoethane	5	4.71	94	( 78-122 )

### Surrogates

4-Bromofluorobenzene (surr)	750		100	( 55-151 )
Toluene-d8 (surr)	750		99	( 85-116 )

## Batch Information

Analytical Batch: VMS21283

Analytical Method: SW8260D-SIM

Instrument: VSA Agilent GC/MS 7890B/5977A

Analyst: JMG

Prep Batch: VXX38036

Prep Method: SW5035A

Prep Date/Time: 10/15/2021 06:00

Spike Init Wt./Vol.: 5 ug/kg Extract Vol: 25 mL

Dupe Init Wt./Vol.: Extract Vol:

## Matrix Spike Summary

Original Sample ID: 1642806  
 MS Sample ID: 1642810 MS  
 MSD Sample ID: 1642811 MSD

Analysis Date: 10/15/2021 16:27  
 Analysis Date: 10/15/2021 14:56  
 Analysis Date: 10/15/2021 15:11  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010, 1216690011

## Results by SW8260D-SIM

Parameter	Sample	Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,2-Dibromoethane	0.0570U	4.57	4.47	98	4.57	4.31	94	78-122	3.60	(< 20 )
<b>Surrogates</b>										
4-Bromofluorobenzene (surr)		1020	1170	114	1020	1160	113	55-151	1.00	
Toluene-d8 (surr)		687	686	100	687	683	99	85-116	0.53	

## Batch Information

Analytical Batch: VMS21283  
 Analytical Method: SW8260D-SIM  
 Instrument: VSA Agilent GC/MS 7890B/5977A  
 Analyst: JMG  
 Analytical Date/Time: 10/15/2021 2:56:00PM

Prep Batch: VXX38036  
 Prep Method: 8260SIM (S) SW5035 Prep  
 Prep Date/Time: 10/15/2021 6:00:00AM  
 Prep Initial Wt./Vol.: 61.14g  
 Prep Extract Vol: 27.93mL

## Method Blank

Blank ID: MB for HBN 1827328 [VXX/38048]

Blank Lab ID: 1643046

QC for Samples:

1216690003

Matrix: Soil/Solid (dry weight)

## Results by SW8260D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Trichlorofluoromethane	25.0U	50.0	15.0	ug/kg
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	105	71-136		%
4-Bromofluorobenzene (surr)	92.9	55-151		%
Toluene-d8 (surr)	104	85-116		%

## Batch Information

Analytical Batch: VMS21293

Analytical Method: SW8260D

Instrument: VRA Agilent GC/MS 7890B/5977A

Analyst: S.S

Analytical Date/Time: 10/18/2021 11:40:00AM

Prep Batch: VXX38048

Prep Method: SW5035A

Prep Date/Time: 10/18/2021 6:00:00AM

Prep Initial Wt./Vol.: 50 g

Prep Extract Vol: 25 mL

Print Date: 10/25/2021 8:48:46AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [VXX38048]  
Blank Spike Lab ID: 1643047  
Date Analyzed: 10/18/2021 11:56

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690003

## Results by SW8260D

Parameter	Blank Spike (ug/kg)			CL
	Spike	Result	Rec (%)	
Trichlorofluoromethane	750	836	111	( 62-140 )
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	750		101	( 71-136 )
4-Bromofluorobenzene (surr)	750		89	( 55-151 )
Toluene-d8 (surr)	750		101	( 85-116 )

## Batch Information

Analytical Batch: **VMS21293**  
Analytical Method: **SW8260D**  
Instrument: **VRA Agilent GC/MS 7890B/5977A**  
Analyst: **S.S**

Prep Batch: **VXX38048**  
Prep Method: **SW5035A**  
Prep Date/Time: **10/18/2021 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: 1643048  
 MS Sample ID: 1643049 MS  
 MSD Sample ID: 1643050 MSD

Analysis Date: 10/18/2021 14:40  
 Analysis Date: 10/18/2021 13:07  
 Analysis Date: 10/18/2021 13:23  
 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1216690003

## Results by SW8260D

Parameter	Sample	Matrix Spike (ug/kg)			Spike Duplicate (ug/kg)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Trichlorofluoromethane	11.9U	356	519	146 *	356	488	137	62-140	6.10	(< 20 )
<b>Surrogates</b>										
1,2-Dichloroethane-D4 (surr)		356	364	102	356	366	103	71-136	0.46	
4-Bromofluorobenzene (surr)		594	367	62	594	367	62	55-151	0.19	
Toluene-d8 (surr)		356	363	102	356	362	102	85-116	0.39	

## Batch Information

Analytical Batch: VMS21293  
 Analytical Method: SW8260D  
 Instrument: VRA Agilent GC/MS 7890B/5977A  
 Analyst: S.S  
 Analytical Date/Time: 10/18/2021 1:07:00PM

Prep Batch: VXX38048  
 Prep Method: Vol. Extraction SW8260 Field Extracted L  
 Prep Date/Time: 10/18/2021 6:00:00AM  
 Prep Initial Wt./Vol.: 105.21g  
 Prep Extract Vol: 25.00mL



### Method Blank

Blank ID: MB for HBN 1826777 [XXX/45705]  
Blank Lab ID: 1641096

Matrix: Soil/Solid (dry weight)

#### QC for Samples:

1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

### 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	9.00	mg/kg
<b>Surrogates</b>				
5a Androstane (surr)	99.4	60-120		%

### Batch Information

Analytical Batch: XFC16108  
Analytical Method: AK102  
Instrument: Agilent 7890B F  
Analyst: IVM  
Analytical Date/Time: 10/11/2021 4:35:00PM

Prep Batch: XXX45705  
Prep Method: SW3550C  
Prep Date/Time: 10/10/2021 1:10:56PM  
Prep Initial Wt./Vol.: 30 g  
Prep Extract Vol: 5 mL

Print Date: 10/25/2021 8:48:51AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [XXX45705]  
 Blank Spike Lab ID: 1641097  
 Date Analyzed: 10/11/2021 16:51

Spike Duplicate ID: LCSD for HBN 1216690 [XXX45705]  
 Spike Duplicate Lab ID: 1641098  
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010

## 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	667	689	103	667	634	95	( 75-125 )	8.30	(< 20 )
<b>Surrogates</b>									
5a Androstane (surr)	16.7		101	16.7		93	( 60-120 )	8.30	

## Batch Information

Analytical Batch: **XFC16108**  
 Analytical Method: **AK102**  
 Instrument: **Agilent 7890B F**  
 Analyst: **IVM**

Prep Batch: **XXX45705**  
 Prep Method: **SW3550C**  
 Prep Date/Time: **10/10/2021 13:10**  
 Spike Init Wt./Vol.: 667 mg/kg Extract Vol: 5 mL  
 Dupe Init Wt./Vol.: 667 mg/kg Extract Vol: 5 mL

## Method Blank

Blank ID: MB for HBN 1826781 [XXX/45706]

Blank Lab ID: 1641129

QC for Samples:

1216690001, 1216690002

Matrix: Soil/Solid (dry weight)

## 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
<b>Surrogates</b>				
2-Methylnaphthalene-d10 (surr)	101	58-103		%
Fluoranthene-d10 (surr)	107	54-113		%

## Batch Information

Analytical Batch: XMS12949  
 Analytical Method: 8270D SIM (PAH)  
 Instrument: SVA Agilent 780/5975 GC/MS  
 Analyst: LAW  
 Analytical Date/Time: 10/13/2021 7:10:00AM

Prep Batch: XXX45706  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/2021 2:16:37PM  
 Prep Initial Wt./Vol.: 22.5 g  
 Prep Extract Vol: 5 mL

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1216690 [XXX45706]  
 Blank Spike Lab ID: 1641130  
 Date Analyzed: 10/13/2021 07:31

Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002

## Results by 8270D SIM (PAH)

Blank Spike (ug/kg)

Parameter	Spike	Result	Rec (%)	CL
1-Methylnaphthalene	111	107	96	(43-111)
2-Methylnaphthalene	111	108	97	(39-114)
Acenaphthene	111	111	100	(44-111)
Acenaphthylene	111	109	98	(39-116)
Anthracene	111	113	102	(50-114)
Benzo(a)Anthracene	111	112	100	(54-122)
Benzo[a]pyrene	111	105	95	(50-125)
Benzo[b]Fluoranthene	111	112	101	(53-128)
Benzo[g,h,i]perylene	111	98.7	89	(49-127)
Benzo[k]fluoranthene	111	109	98	(56-123)
Chrysene	111	113	102	(57-118)
Dibenzo[a,h]anthracene	111	103	93	(50-129)
Fluoranthene	111	114	103	(55-119)
Fluorene	111	112	101	(47-114)
Indeno[1,2,3-c,d] pyrene	111	103	93	(49-130)
Naphthalene	111	103	92	(38-111)
Phenanthrene	111	113	101	(49-113)
Pyrene	111	114	102	(55-117)

## Surrogates

2-Methylnaphthalene-d10 (surr)	111		93	(58-103)
Fluoranthene-d10 (surr)	111		100	(54-113)

## Batch Information

Analytical Batch: XMS12949  
 Analytical Method: 8270D SIM (PAH)  
 Instrument: SVA Agilent 780/5975 GC/MS  
 Analyst: LAW

Prep Batch: XXX45706  
 Prep Method: SW3550C  
 Prep Date/Time: 10/10/2021 14:16  
 Spike Init Wt./Vol.: 111 ug/kg Extract Vol: 5 mL  
 Dupe Init Wt./Vol.: Extract Vol:

## Matrix Spike Summary

Original Sample ID: 1216690001  
 MS Sample ID: 1641131 MS  
 MSD Sample ID: 1641132 MSD

Analysis Date: 10/13/2021 7:52  
 Analysis Date: 10/13/2021 8:12  
 Analysis Date: 10/13/2021 8:33  
 Matrix: Soil/Solid (dry weight)

QC for Samples: 1216690001, 1216690002

## 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	13.5U	121	121	99	121	111	92	43-111	7.80	(< 20)
2-Methylnaphthalene	13.5U	121	123	102	121	114	95	39-114	7.20	(< 20)
Acenaphthene	13.5U	121	122	101	121	111	91	44-111	10.30	(< 20)
Acenaphthylene	13.5U	121	122	101	121	113	93	39-116	7.90	(< 20)
Anthracene	13.5U	121	132	109	121	120	99	50-114	9.40	(< 20)
Benzo(a)Anthracene	10.9J	121	136	103	121	122	92	54-122	11.00	(< 20)
Benzo(a)pyrene	16.2J	121	135	98	121	119	85	50-125	12.60	(< 20)
Benzo[b]Fluoranthene	22.8J	121	144	100	121	125	85	53-128	13.70	(< 20)
Benzo[g,h,i]perylene	15.7J	121	109	77	121	90.9	62	49-127	18.40	(< 20)
Benzo[k]fluoranthene	8.40J	121	129	99	121	116	88	56-123	10.80	(< 20)
Chrysene	17.9J	121	144	104	121	128	91	57-118	12.20	(< 20)
Dibenzo[a,h]anthracene	13.5U	121	101	83	121	88.6	73	50-129	13.10	(< 20)
Fluoranthene	25.2J	121	172	121 *	121	141	95	55-119	20.00	(< 20)
Fluorene	13.5U	121	125	103	121	114	95	47-114	8.70	(< 20)
Indeno[1,2,3-c,d] pyrene	11.3J	121	111	82	121	94.8	69	49-130	16.00	(< 20)
Naphthalene	10.8U	121	118	97	121	108	89	38-111	8.70	(< 20)
Phenanthrene	10.8J	121	155	119 *	121	127	95	49-113	20.40	* (< 20)
Pyrene	21.9J	121	163	116	121	140	97	55-117	15.00	(< 20)
<b>Surrogates</b>										
2-Methylnaphthalene-d10 (surr)		121	112	93	121	106	87	58-103	6.30	
Fluoranthene-d10 (surr)		121	117	96	121	110	90	54-113	6.30	

## Batch Information

Analytical Batch: XMS12949  
 Analytical Method: 8270D SIM (PAH)  
 Instrument: SVA Agilent 780/5975 GC/MS  
 Analyst: LAW  
 Analytical Date/Time: 10/13/2021 8:12:00AM

Prep Batch: XXX45706  
 Prep Method: Sonication Extr Soil 8270 PAH SIM 5ml  
 Prep Date/Time: 10/10/2021 2:16:37PM  
 Prep Initial Wt./Vol.: 22.63g  
 Prep Extract Vol: 5.00mL

Print Date: 10/25/2021 8:49:00AM



**1216690**

ARES  
P.O. Box 83050  
Fairbanks, Alaska 99708  
Phone: 907.374.3226  
Fax: 907.374.2319

**Chain of Custody Report**

Client: Alaska Resources and Environmental Services  
Report To: Lyle Gresehover  
Address: ARES  
P.O. Box 83050  
lyle@ak-res.com  
Phone: (907) 374-3226 Fax: (907) 374-3219

Invoice To: ARES  
P.O. Box 83050  
Fairbanks, Alaska 99708  
Laboratory Name: SGS  
Address: 3180 Peger Rd #190,  
Fairbanks, AK 99700

**Turnaround Request**  
In Business Days

Organic & Inorganic Analyses  
10 7 5 4 3 2 1 <1

Petroleum Hydrocarbon Analyses  
5 4 3 2 1 <1

Specify Other:  
Report Tier Levels: Tier II reporting requested (results + QC)

Project Name: Everts Air Fuel, 5472  
Mail Trail  
Project Number:  
Sampled By: Tyler Teunissen, Josh Klynstra

Preservative  
METH METH METH METH N/A N/A N/A N/A

Sample Identification	Sampling Date/Time	8260D				8260D SIM				PAH	Lab ID
		VOCS	GRO	8260D SIM	EDB	AK 102	DRO	6020A Lead	8260D SIM		
1 21-MTR-01	10/6/2021 1358	X	X	X	X	X	X	X	X	X	S 2
2 21-MTR-02	10/6/2021 1403	X	X	X	X	X	X	X	X	X	S 2
3 21-MTR-03	10/6/2021 1408	X	X	X	X	X	X	X	X	X	S 2
4 21-MTR-04	10/6/2021 1413	X	X	X	X	X	X	X	X	X	S 2
5 21-MTR-05	10/6/2021 1418	X	X	X	X	X	X	X	X	X	S 2
6 21-MTR-06	10/6/2021 1423	X	X	X	X	X	X	X	X	X	S 2
7 21-MTR-07	10/6/2021 1428	X	X	X	X	X	X	X	X	X	S 2
8 21-MTR-08	10/6/2021 1433	X	X	X	X	X	X	X	X	X	S 2
9 21-MTR-09	10/6/2021 1438	X	X	X	X	X	X	X	X	X	S 2
10 21-MTR-10	10/6/2021 1443	X	X	X	X	X	X	X	X	X	S 2
11 Trip Blank	10/6/2021 800	X	X	X	X						O 1

Released By: *[Signature]* Date: 10/06/2021  
Print Name: Amanda Mattoy Firm: ARES Date: 10/06/2021  
Received By: *[Signature]* Date: 10/06/2021  
Print Name: Celine F. Misset Firm: SGS Date: 10/06/2021  
Additional Remarks: 1-6 D23 Temp: 4.8 Page 1 of 1



e-Sample Receipt Form FBK

SGS Workorder #:

ARES

ARES

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below	
<b>Chain of Custody / Temperature Requirements</b>		Yes	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A		
COC accompanied samples?	Yes		
DOD: Were samples received in COC corresponding coolers?	N/A		
<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	@ 4.8 °C Therm. ID: D57
		Cooler ID:	@ °C Therm. ID:
		Cooler ID:	@ °C Therm. ID:
		Cooler ID:	@ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.			
*If >6°C, were samples collected <8 hours ago?			
If <0°C, were sample containers ice free?			
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.			
<b>Holding Time / Documentation / Sample Condition Requirements</b>		Note: Refer to form F-083 "Sample Guide" for specific holding times.	
Do samples match COC** (i.e., sample IDs, dates/times collected)?	N/C		
**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 samples in good condition (no leaks/cracks/breakage)?	Yes		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals))	Yes		
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?	N/C		
For Rush/Short Hold Time, was RUSH/Short HT email sent?	N/A		
<b>Note to Client:</b> Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.			
Additional notes (if applicable):			
<b>SGS Profile #</b>	<b>334646</b>	334646	



e-Sample Receipt Form

SGS Workorder #:

1216690

1216690

Review Criteria		Condition (Yes, No, N/A)	Exceptions Noted below	
<b>Chain of Custody / Temperature Requirements</b>		N/A	Exemption permitted if sampler hand carries/delivers.	
Were Custody Seals intact? Note # & location	N/A			
COC accompanied samples?	Yes			
DOD: Were samples received in COC corresponding coolers?	N/A			
<input type="checkbox"/> N/A <b>**Exemption permitted if chilled &amp; collected &lt;8 hours ago, or for samples where chilling is not required</b> Temperature blank compliant* (i.e., 0-6 °C after CF)?		Yes	Cooler ID: 1	@ 1.6 °C Therm. ID: D23
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		N/A	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?		Yes		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.				
<b>Holding Time / Documentation / Sample Condition Requirements</b>		Note: Refer to form F-083 "Sample Guide" for specific holding times.		
Were samples received within holding time?		Yes		
Do samples <b>match COC**</b> (i.e., sample IDs, dates/times collected)? **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		Yes		
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	N/A	***Exemption permitted for metals (e.g, 200.8/6020B).
<b>Volatile / LL-Hg Requirements</b>				
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	No	Trip Blank was present however did not have sand. Sand added in lab. PM notified.		
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/A			
Were all soil VOAs field extracted with MeOH+BFB?	Yes			
<b>Note to Client:</b> Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.				
Additional notes (if applicable):				



## 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>
1216690001-A	No Preservative Required	OK			
1216690001-B	Methanol field pres. 4 C	OK			
1216690002-A	No Preservative Required	OK			
1216690002-B	Methanol field pres. 4 C	OK			
1216690003-A	No Preservative Required	OK			
1216690003-B	Methanol field pres. 4 C	OK			
1216690004-A	No Preservative Required	OK			
1216690004-B	Methanol field pres. 4 C	OK			
1216690005-A	No Preservative Required	OK			
1216690005-B	Methanol field pres. 4 C	OK			
1216690006-A	No Preservative Required	OK			
1216690006-B	Methanol field pres. 4 C	OK			
1216690007-A	No Preservative Required	OK			
1216690007-B	Methanol field pres. 4 C	OK			
1216690008-A	No Preservative Required	OK			
1216690008-B	Methanol field pres. 4 C	OK			
1216690009-A	No Preservative Required	OK			
1216690009-B	Methanol field pres. 4 C	OK			
1216690010-A	No Preservative Required	OK			
1216690010-B	Methanol field pres. 4 C	OK			
1216690011-A	Methanol field pres. 4 C	OK			

### Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

QN - Insufficient sample quantity provided.

**Laboratory Data Review Checklist**

Completed By:

Josh Klynstra

Title:

Environmental Chemist

Date:

5 November, 2021

Consultant Firm:

Alaska Resources and Environmental Services

Laboratory Name:

SGS North America Inc.

Laboratory Report Number:

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

ADEC File Number:

Hazard Identification Number:

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

**Note: Any N/A or No box checked must have an explanation in the comments box.**

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

Yes  No  N/A  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  N/A  Comments:

No samples were transferred.

2. Chain of Custody (CoC)

a. CoC information completed, signed, and dated (including released/received by)?

Yes  No  N/A  Comments:

b. Correct analyses requested?

Yes  No  N/A  Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

Yes  No  N/A  Comments:

The temperature of the sample cooler upon arrival at SGS Fairbanks was 4.8° C. The temperature of the sample cooler upon arrival at SGS Anchorage was 1.6° C.

b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

Yes  No  N/A  Comments:

All samples arrived at the laboratory in good condition and properly preserved.

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

Yes  No  N/A  Comments:

All samples arrived at the laboratory in good condition and properly preserved.

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  N/A  Comments:

The case narrative noted that the trip blank did not have sand. This is likely due to the fact that the trip blank was created in the field by the QEP adding a methanol VOA to an empty sample container.

e. Data quality or usability affected?

Comments:

Data not affected.

#### 4. Case Narrative

a. Present and understandable?

Yes  No  N/A  Comments:

b. Discrepancies, errors, or QC failures identified by the lab?

Yes  No  N/A  Comments:

c. Were all corrective actions documented?

Yes  No  N/A  Comments:

No corrective actions noted in the case narrative.

d. What is the effect on data quality/usability according to the case narrative?

Comments:

The case narrative did not discuss the effect on data quality or usability except when noted above in section 4.b.

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

Yes  No  N/A  Comments:

b. All applicable holding times met?

Yes  No  N/A  Comments:

c. All soils reported on a dry weight basis?

Yes  No  N/A  Comments:

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

Yes  No  N/A  Comments:

1,2,3-Trichloropropane, 1,2-Dibromoethane and Dibromochloromethane have detection limits that exceed ADEC CL's in one or more samples.

e. Data quality or usability affected?

Data quality is affected. Analytes with elevated detection limits could be present at concentrations that exceed ADEC cleanup levels. Data is still usable. Sample results with detection limits that exceed ADEC CUL's are highlighted in blue in the analytical summary table.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

Yes  No  N/A  Comments:

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?

Yes  No  N/A  Comments:

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

Comments:

No data affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes  No  N/A  Comments:

No data flagged

v. Data quality or usability affected?

Comments:

Data not 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  N/A  Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes  No  N/A  Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes  No  N/A  Comments:

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from LCS/LCSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes  No  N/A  Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

no recoveries were outside limits.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes  No  N/A  Comments:

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

Data not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

**Note: Leave blank if not required for project**

i. Organics – One MS/MSD reported per matrix, analysis and 20 samples?

Yes  No  N/A  Comments:

An MS/MSD was reported for methods 8260D, 8260D-SIM, 8270D-SIM and SW6020B.

ii. Metals/Inorganics – one MS and one MSD reported per matrix, analysis and 20 samples?

Yes  No  N/A  Comments:

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?

Yes  No  N/A  Comments:

8260D – 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene in the MSD for batch VXX37996 exceeded recovery limits, Hexachlorobutadiene for the MS and MSD in batch VXX38000 exceeded recovery limits. Trichlorofluoromethane exceeded recovery limits for the MS in batch VXX38048.

8270D-SIM – Fluoranthene and Phenanthrene exceeded recovery limits for the MS in batch VXX45706.

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.

Yes  No  N/A  Comments:

8270D-SIM – Phenanthrene recovered outside RPD limits in batch VXX45706.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

8260D – The following samples are affected by the recovery failure in batch VXX37996: 1216690001, 1216690002, 1216690003, 1216690004, 1216690005, 1216690006, 1216690007, 1216690008, 1216690009, 1216690010. The following sample is affected by the recovery failure in batch VXX38000: 1216690011. The following sample is affected by the recovery failure in batch VXX38048: 1216690003.

8270D-SIM – The following samples are affected by the recovery failure in batch VXX45706: 1216690001, 1216690002.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes  No  N/A  Comments:

The associated data is flagged QN for MS/MSD recovery failures.

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

Since all associated LCS recoveries were within limits, there is no effect to the data. MS/MSD recovery failures are a result of matrix effects and not laboratory quality controls. Data remains usable.

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

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC and laboratory samples?

Yes  No  N/A  Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)

Yes  No  N/A  Comments:

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?

Yes  No  N/A  Comments:

All recoveries within limits, no data flagged.

iv. Data quality or usability affected?

Comments:

Data not affected.

e. Trip Blanks

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes  No  N/A  Comments:

The case narrative noted that the trip blank did not have sand. This is likely due to the fact that the trip blank was created in the field by the QEP adding a methanol VOA to an empty sample container.

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

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  N/A  Comments:

All samples delivered to the laboratory in a single cooler.

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

Yes  No  N/A  Comments:

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

Comments:

No data affected.

v. Data quality or usability affected?

Comments:

Data not affected.

f. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes  No  N/A  Comments:

ii. Submitted blind to lab?

Yes  No  N/A  Comments:

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

iii. Precision – All relative percent differences (RPD) less than specified project objectives?  
(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<sub>1</sub> = Sample Concentration  
R<sub>2</sub> = Field Duplicate Concentration

Yes  No  N/A  Comments:

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

Data not affected

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

Yes  No  N/A  Comments:

All sample equipment for this project was new and disposable.

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

Yes  No  N/A  Comments:

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

Comments:

N/A

iii. Data quality or usability affected?

Comments:

N/A

1216690

Laboratory Report Date:

10/25/2021

CS Site Name:

Everts Air Fuel, 5472 Mail Trail

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

a. Defined and appropriate?

Yes  No  N/A

Comments: