

Appendix F4: Limited Phase II Environmental Site Assessment

Appendices

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GEOTECHNICAL
ENVIRONMENTAL
WATER RESOURCES
CONSTRUCTION SERVICES

February 4, 2020

Project No.
16664.000.000

Mr. Joe Martin
TH Trumark Homes, LLC
450 Newport Center Drive, Suite 300
Newport Beach, CA 92660

Subject: Former La Puerta School Site
2475 Forbes Avenue
Claremont, California

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

- References:
1. Environmental Geoscience Services; Phase I Environmental Site Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California; August 16, 2002.
 2. Environmental Geoscience Services; Work Plan – Preliminary Endangerment Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California; December 11, 2002.
 3. Environmental Geoscience Services; Revised Work Plan – Preliminary Endangerment Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California (DTSC Site Code 304393-11); January 21, 2003.
 4. Environmental Geoscience Services; Final Report – Preliminary Endangerment Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California (DTSC Site Code 304393-11); August 13, 2003.
 5. Department of Toxic Substances Control; Removal Action Closure Report No Further Action Letter, Proposed La Puerta Elementary School Site, 2475 North Forbes Avenue, Claremont (Site Code 304393); November 12, 2004.

Dear Mr. Martin:

ENGEO is pleased to submit the findings of our environmental peer review and limited phase II environmental site assessment (ESA) services for the approximately 9.7-acre subject site (Site), located at 2475 Forbes Avenue in Claremont, California (Figures 1 and 2). The purpose of the environmental peer review and limited phase II ESA was to determine if any data gaps existed from previous investigations and to assess potential impacts to Site soil associated with past and current activities at the Site.

BACKGROUND

SITE IDENTIFICATION			
Site Name:	Former La Puerta School Site		
Site Address:	2475 Forbes Avenue		
City:	Claremont	County: Los Angeles	State: California
Current Land Use:	Paved parking lot, open space, soil stockpile area		
Assessor Parcel Number:	Portion of 8670003900		

SUMMARY OF REVIEWED REPORTS

1. Environmental Geoscience Services; Phase I Environmental Site Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California; August 16, 2002.

In August 2002, Environmental Geoscience Services (EGS) prepared a Phase I Environmental Site Assessment. The EGS report described the Site as mostly undeveloped land and the northernmost area developed with an elementary school. The developed area consisted of three main structures (two brick structures, built approximately 1968, and one temporary wooden structure), an enclosure that housed electrical transformers, and an asphalt parking area. The Site was used for agricultural purposes, possibly citrus trees, from at least 1928 to 1967. A large above-ground storage tank, approximately 70 feet in diameter, was noted in the northeastern corner of the Site in the 1949 and 1952 aerial photographs. Beginning in the late 1960s, the Site was developed as an elementary school, and the three school structures (two brick structures and a portable classroom) remained on site until at least 2018.

EGS identified one Recognized Environmental Condition associated with the Site – the previous agricultural land use – and recommended: “that a sampling and analysis plan be developed and implemented to characterize the near surface soils for the presence of residual agricultural chemicals, if any.”

2. Environmental Geoscience Services; Revised Work Plan – Preliminary Endangerment Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California (DTSC Site Code 304393-11); January 21, 2003.

As part of a Preliminary Endangerment Assessment (PEA) for the Site, EGS developed a Work Plan and a revised Work Plan, which included a sampling strategy and a health and safety plan. The revision was prepared to clarify from the Department of Toxic Substances Control (DTSC). EGS conducted three sampling events on the following dates: February 19 and 20, 2003; April 14, 2003; and April 25, 2003. The proposed sample locations, depths, and laboratory analysis are summarized below.

Throughout the Site

Six locations were analyzed for organochlorine pesticides (OCPs) and arsenic, with sample depths at 0.5 and 2.5 feet below ground surface (bgs). Three of these 12 samples, collected at a depth of 0.5 foot bgs, were also analyzed for Title 22 metals.

Two stockpiles and graded area

Five sample locations were analyzed for OCPs, CAM-17 metals, semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs), at sample depths of 1, 3, and 5 feet bgs. The samples collected at 3 and 5 feet bgs were also analyzed for volatile organic compounds (VOCs).

Location of former AST (northeastern corner of Site)

The proposed sample plan included three locations analyzed for total petroleum hydrocarbons (TPH) carbon chain, SVOCs, OCPs, and arsenic at sample depths of 1 and 5 feet bgs. Samples collected at 5 and 10 feet bgs were also analyzed for VOCs. Following subsequent laboratory analysis, EGS collected samples at an additional 55 locations and analyzed them for arsenic at 1 and 2.5 feet bgs, and four locations were analyzed for TPH at 1 and 2.5 feet bgs.

Electrical transformer footprint

Four locations were analyzed for PCBs at sample depths of 0.5 and 3 feet bgs.

Existing structure footprints

Eight locations were analyzed for total lead at a sample depth of 0.5 foot bgs.

Offsite background samples

Four locations (plus to replicate samples) were analyzed for Title 22 metals at a sample depth of 0.5 foot bgs.

3. Environmental Geoscience Services; Final Report – Preliminary Endangerment Assessment, La Puerta School Site, 2475 Forbes Avenue, Claremont, California (DTSC Site Code 304393-11); August 13, 2003.

Based on “the analytical results from the PEA field investigation work, EGS presents the following conclusions:

- *Asbestos-containing building materials have been identified within the two site structures.*
- *Organochlorine pesticides were detected in low concentrations at all areas of the site.*
- *The concentrations of metals detected at the site were similar to background concentrations, except for the elevated concentrations of arsenic which were only detected in the soil under the asphalt paved area at the northeast corner of the site.*
- *PCBs and VOCs were not detected in any of the samples analyzed.*
- *Very low concentrations of SVOC and PAHS were detected in only two soil samples.*
- *TPH long-chain hydrocarbons; [motor oil] were only detected in the shallow soil in the northeast corner of the site, in the same general area where arsenic was detected in the soil.*
- *The soil samples from the stockpiled soil did not identify any detectable concentrations of volatile organic compounds (from deeper samples), TPH, or PCBs. The reported concentrations of organochlorine pesticides and CAM 17 metals were consistent with the findings from soil samples analyzed from other areas of the site (except for the northeast corner arsenic data). Only one sample revealed low concentrations of semi-volatile organic compounds, which were within the acceptable range. The soil samples collected from the stockpiled soil consisted of gravelly silty sands, gravelly sands, and sandy gravels, which are similar to the soil encountered in other areas of the site. Although the origin of the stockpiled soil is unknown, EGS concludes that the stockpiled soil does not appear to be a concern.*
- *Low concentrations of lead were detected in the soil around the buildings.*

EGS made two recommendations, as follows:

- *“Remove all asbestos containing building materials prior to conducting any demolition and/or remodeling work. According to the District, all asbestos containing materials will be removed prior to any demolition and/or remodeling work. The asbestos removal work will be conducted within the next 60 days.*
- *Mitigate the potential health risk posed by the presence of arsenic impacted soil at the northeast corner of the site. Prior to the planned site development work, EGS recommends that the arsenic impacted soil be removed from the site. The soil excavation and removal*

activities will need to be conducted under the oversight of the DTSC, within the guidelines of the DTSC's Voluntary Cleanup Program. Upon approval of the findings presented in this PEA, the Claremont Unified School District should initiate an agreement with the DTSC (Voluntary Cleanup Agreement). This agreement will establish an understanding for the procedure protocol so that the soil removal work will be completed in accordance with the DTSC's requirements for school construction sites."

4. Department of Toxic Substances Control; Removal Action Closure Report No Further Action Letter, Proposed La Puerta Elementary School Site, 2475 North Forbes Avenue, Claremont (Site Code 304393); November 12, 2004.

In November 2004, DTSC issued a letter to approve EGS's October 2004 Removal Action Closure (RAC) Report. In the letter, DTSC stated that the target cleanup goals, 8.68 milligrams/kilogram (mg/kg) arsenic and 1,000 mg/kg TPH, were achieved, and concurred that "no further action is necessary" for the site at 2475 North Forbes Avenue. The DTSC no further action (NFA) letter states that approximately 629 tons (27 trucks) of contaminated soil was removed and off-hauled as non-hazardous waste.

At this time, ENGEO has not been provided with the two reports referenced in the DTSC NFA letter: (1) the Removal Action Workplan (RAW) and (2) the RAC. Therefore, the concentrations of arsenic and TPH remaining in the excavated area are unknown.

Trumark provided us with aerial photographs on October 16, 2019, in which the Site appeared to be vacant land with asphalt-paved areas in the north, no structures or foundations, and an area of stockpiled soil in the southwestern portion of the Site. Based on discussions with Trumark, it was unknown if the soil was actively being imported to the Site.

SOIL SAMPLING AND LABORATORY TESTING

We notified the Underground Service Alert (USA Dig Alert) prior to drilling, and we additionally retained a private utility locator to survey the boring locations. A C-57 licensed direct-push drilling contractor advanced 18 borings on December 30, 2019, at the Site for a total of 40 soil samples. Additionally, we collected 24 soil samples with hand tools on December 30, 2019, and January 21, 2020.

The borings were advanced to a maximum depth of approximately 10 feet below the ground surface; therefore, no boring permit was required from the County of Los Angeles. We did not encounter groundwater during the drilling activities to the depth explored.

Confirmation Sampling – Former AST, Northeast Area

As described above, previous sampling and testing conducted by others identified near-surface and subsurface arsenic and petroleum impacts at the former AST location in the northeast corner of the Site. The impacted soil was reportedly removed to below the DTSC-approved cleanup goals of 8.68 mg/kg arsenic and 1,000 mg/kg TPH. Due to the lack of laboratory data for the remaining soil within the former excavation area, we completed confirmation sampling at two borings near the former AST area.

- A Geoprobe® direct-push rig advanced two borings – one boring was located within the former excavation limits, and one boring was located just outside of the former excavation limits

(Figure 3). We retrieved continuous soil cores were from each boring and collected soil samples at depths of 1, 2.5, 5, and 10 feet bgs. We screened each continuous core for VOCs, using a photoionization detector (PID).

- Upon collection of samples, we placed a sample label on the samples, including the project number, a unique sample number, and the time/date collected. We then placed the soil samples in an ice-cooled chest and submitted under documented chain-of-custody to a State-certified laboratory.
- We instructed the laboratory to analyze the soil samples on a discrete basis for TPH as gasoline, diesel, and motor oil (TPH-g, d, and mo) (EPA Method 8015M with silica gel cleanup), VOCs (EPA Method 8260), and arsenic (EPA Methods 6020).

Characterization Sampling – Former Structures Area, Northeast Area

Historically, it was common practice to apply OCPs around structure foundations as insecticides for termite control. Based on the previous soil sampling reports, it appears that soil samples collected near the structure foundations were analyzed only for lead. As discussed above, the October 2019 aerial photographs indicated that the foundations of the former structures have been removed. The purpose of this soil sampling was to determine if the soil near the former structures exhibits residual impacts from potential past OCP application.

- In accordance with the *DTSC Interim Guidance Evaluation Of School Sites With Potential Soil Contamination As A Result Of Lead From Lead-Based Paint, Organochlorine Pesticides From Termiticides, And Polychlorinated Biphenyls From Electrical Transformers (June 2006)*, we collected 32 discrete soil samples from 16 locations throughout the former structure area.
- A Geoprobe® direct-push rig advanced 16 borings throughout the area of former structures (Figure 3). Though the figures are visible in the aerial photograph, no structures were present at the time of sampling. We retrieved continuous soil cores from each boring and collected soil samples at two depths – 0 to 6 inches, and 3 feet bgs.
- Upon collection of samples, we placed a sample label on the samples, including the project number, a unique sample number, and the time/date collected. We then placed the soil samples in an ice-cooled chest and submitted under documented chain-of-custody to a State-certified laboratory.
- We instructed the laboratory to composite adjacent soil samples from similar depths as 4-point composite samples (eight total). The soil samples were analyzed for OCPs (EPA Method 8081) on a 4-point composite basis.

Characterization Sampling – Existing Stockpile, Southwest Area

Numerous stockpiles were located in the southwestern portion of the Site. It is our understanding that this import soil is undocumented. The purpose of this soil sampling was to characterize soil throughout the stockpile to determine the environmental suitability for residential engineered fill. It should be noted that during our sampling event on January 21, 2020, we observed haul trucks bringing additional soil onto the Site. We sampled only the material that had been present during our initial visit, as shown on Figure 4, which does not include the additional import material.

- In general accordance with the DTSC Fill Advisory document, we collected 24 soil samples from approximately 1 foot bgs throughout the stockpile area (Figure 4). Using hand-sampling equipment, we collected the soil samples in 2-inch by 6-inch stainless steel liners and sealed the samples with Teflon® sheeting and snug-fitting end caps.

Upon collection of samples, we placed a sample label on the samples, including the project number, a unique sample number, and the time/date collected. We then placed the soil samples in an ice-cooled chest and submitted under documented chain-of-custody to a State-certified laboratory.

- We instructed the laboratory to analyze the 16 samples on a discrete basis for the following:
 - TPH-g, d, and mo (EPA Method 8015; with silica gel cleanup).
 - VOCs (EPA Method 8260).
 - SVOCs (EPA Method 8270 SIM).
- We instructed the laboratory to composite adjacent samples as 4-point composite samples (four total samples) and analyze for the following:
 - CAM-17 metals (EPA Methods 6010/7471A).
 - OCPs (EPA Method 8081).
 - PCBs (EPA Method 8082).

ANALYTICAL RESULTS

We compared the laboratory test results to corresponding United States Environmental Protection Agency USEPA Regional Screening Levels (RSLs¹) and California Department of Toxic Substance Control Modified Screening Levels (DTSC SLs²), assuming a residential land use scenario. The laboratory reports are attached in their entirety in Appendix A and Appendix B.

Confirmation Sampling – Former AST, Northeast Area

Based on the review of laboratory test results for the eight discrete soil samples, six samples reported TPH-g, TPH-d, TPH-mo, and VOCs to be below the corresponding laboratory detection limits, or “non-detectable”. Two samples, “01-FAST-01@10” and “01-FAST-02@1”, reported detectable concentrations of TPH-d and TPH-mo. Maximum concentrations were reported as 28.1 and 109 mg/kg, respectively. The TPH concentrations are below corresponding residential screening levels, and below the previously established DTSC cleanup goal of 1,000 mg/kg.

Each soil sample reported detectable concentrations of arsenic, with concentrations ranging between 1.40 and 6.15 mg/kg. Though arsenic was detected in each of the eight samples, the reported concentrations are within the background concentration of 12 mg/kg for arsenic in Southern California³, and below the previously established DTSC cleanup goal of 8.68 mg/kg. TPH and arsenic were the only constituents analyzed in this area.

¹ US Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for residential land use (November 2019).

² Department of Toxic Substance Control (DTSC) Modified Screening Levels DTSC-SLs for residential land use (April 2019).

³ Department of Toxic Substances Control (DTSC) Determination of a Southern California Background Arsenic Concentration in Soil, March 2008

Characterization Sampling – Former Structures Area, Northeast Area

Seven of the eight soil composite soil samples reported all OCPs as non-detectable. One sample, “4-pt composite 01-FS-07, 10, 11, 12@0”, reported 4,4'-DDT as 0.0051 mg/kg, which is below the corresponding screening levels. All other OCPs in the sample were reported as non-detectable. OCPs were the only constituents analyzed in this area.

Characterization Sampling – Existing Stockpile, Southwest Area

The 24 discrete soil samples reported TPH-g and VOCs as non-detectable. Detectable concentrations of TPH-d and TPH-mo were reported in five samples, “01-SP-A3”, “01-SP-C2”, “02-SP-01”, “02-SP-04”, and “02-SP-05”, with maximum concentrations of 36.8 and 46.2 mg/kg, respectively. The TPH concentrations are below corresponding residential screening levels and below the established DTSC cleanup goal of 1,000 mg/kg.

Twelve samples reported detectable concentrations of SVOCs SIM, all of which were below corresponding screening levels, with the exception of one sample, “01-SP-B5”, which exceeded the corresponding screening level for benzo(a)pyrene (BaP). We performed a statistical analysis of the BaP sample results to calculate the 95 percent upper confidence limit (95% UCL) using ProUCL Version 5.1.002. The resulting BaP concentration value is 0.077 mg/kg, which is less than the corresponding screening level of 0.11 mg/kg. The UCL output is included in Appendix C.

The four 4-point composite samples reported OCPs and PCBs as non-detectable, with the exception of one sample, “4-pt composite 02-SP-01, 02, 03, 04”, reporting DDE as 0.012 mg/kg. The DDE concentration is below the corresponding residential screening level. Each sample reported detectable metal concentrations below screening levels, with the exception of arsenic. As described above, the reported arsenic concentrations are within background concentrations for arsenic in Southern California and below the DTSC cleanup goal of 8.68 mg/kg.

CONCLUSIONS

Based on field observations and the analytical results, the remaining soil within/near the former above-ground storage tank, and also within the the area of former structures, does not exhibit significant residual impacts and is suitable for residential development.

One sample from the stockpile, Sample “01-SP-B5”, reported a concentration of BaP that exceeded the corresponding screening level fo residential use. After performing a statistical analysis of the BaP sample results for all 24 stockpile soil samples, which represent the soil stockpiled on the Site as of December 30, 2019, the 95% UCL is below the corresponding residential screening level. It is our professional opinion that the stockpiled soil present on December 30, 2019, does not exhibit significant residual impacts and is suitable for residential development.

As described above, we observed haul trucks importing additional material during our January 21, 2020 sample event. Based on our understanding that the source and volume of import is unknown, we recommend sampling the additional import soil to determine environmental suitability prior to use as engineered fill.

If you have any questions on any portion of this letter, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated

Adrianna Lundberg
aml/sm/jf

Shawn Munger, CHG

Attachments: Figures 1 through 4
Appendix A – Laboratory Analytical Reports, Enthalpy Analytical, LLC
- Former AST and Former Structures – Northeast Area
Appendix B – Laboratory Analytical Reports, Enthalpy Analytical, LLC
- Existing Stockpile – Southwest Area
Appendix C – UCL Output for BaP in the Southwest Stockpile

DRAFT

FIGURES

Figure 1 – Vicinity Map

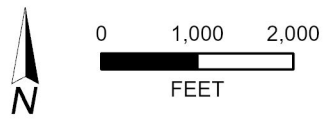
Figure 2 – Site Plan

Figure 3 – Inset 1: Sample Plan for Former AST and Former Structures

Figure 4 – Inset 2: Sample Plan for Existing Stockpile

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BASEMAP SOURCE: ESRI MAPPING SERVICE



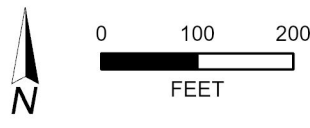
VICINITY MAP
 2475 FORBES AVENUE, FORMER LA PUERTA SCHOOL
 CLAREMONT, CALIFORNIA

PROJECT NO. : 16664.000.000	
SCALE: AS SHOWN	
DRAWN BY: MAT	CHECKED BY: SPM

FIGURE NO.
1



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BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE



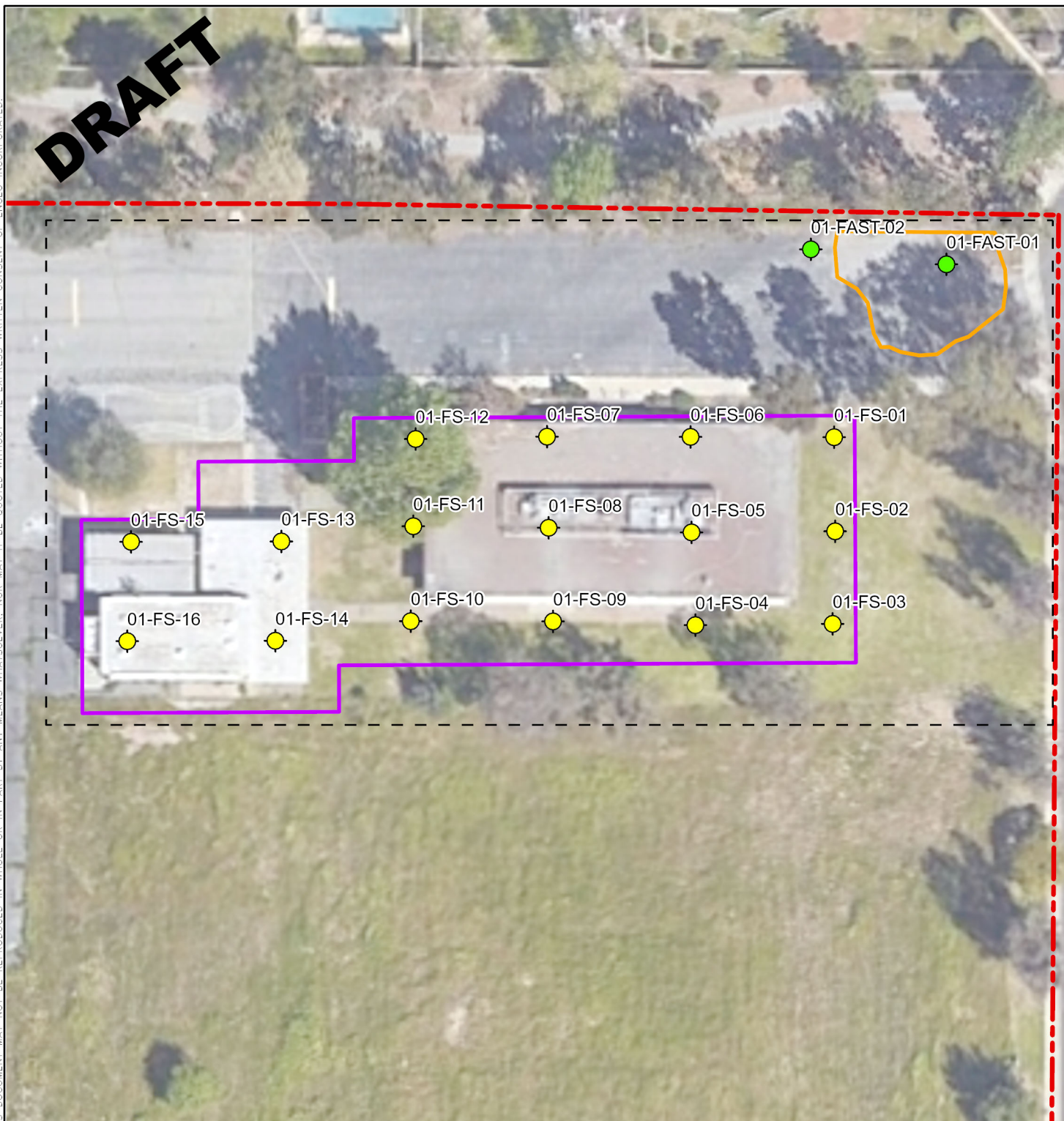
SITE PLAN
 2475 FORBES AVENUE, FORMER LA PUERTA SCHOOL
 CLAREMONT, CALIFORNIA

PROJECT NO. : 16664.000.000	
SCALE: AS SHOWN	
DRAWN BY: MAT	CHECKED BY: SPM

FIGURE NO.
2

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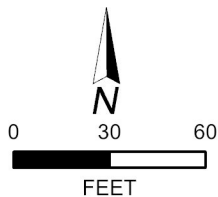


EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE
- AREA OF FORMER STRUCTURES
- AREA OF PREVIOUS EXCAVATION

- 01-FAST-01 SOILS SAMPLES AT 1', 2.5', 5', AND 10' BGS (ENGEO; DECEMBER, 2019)
- 01-FS-16 SOILS SAMPLES AT 0' AND 3' BGS (ENGEO; DECEMBER, 2019)



BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE



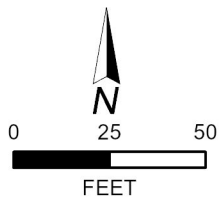
INSET 1: SAMPLE PLAN FOR FORMER AST AND FORMER STRUCTURES
 2475 FORBES AVENUE, FORMER LA PUERTA SCHOOL
 CLAREMONT, CALIFORNIA

PROJECT NO. : 16664.000.000	
SCALE: AS SHOWN	
DRAWN BY: MAT	CHECKED BY: SPM

FIGURE NO.
3





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EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

-  PROJECT SITE
-  STOCKPILE
-  STOCKPILE SOIL SAMPLE COLLECTED FROM 1' BGS (ENGEO, DECEMBER 2019)
-  STOCKPILE SOIL SAMPLE COLLECTED FROM 1' BGS (ENGEO, JANUARY 2020)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2020



INSET 2: SAMPLE PLAN FOR EXISTING STOCKPILE
 2475 FORBES AVENUE, FORMER LA PUERTA SCHOOL
 CLAREMONT, CALIFORNIA

PROJECT NO. : 16664.000.000	
SCALE: AS SHOWN	
DRAWN BY: MAT	CHECKED BY: SPM

FIGURE NO.
4

APPENDIX A

**Laboratory Analytical Report
Former AST and Former Structures – Northeast Area**

Enthalpy Analytical, LLC



Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com



Client: ENGEO Inc.
Address: 6 Morgan, Suite 162
Irvine, CA 92618-1922

Lab Request: 423295
Report Date: 01/13/2020
Date Received: 12/30/2019
Client ID: 15790

Attn: Adrianna Lundberg

Comments: Former La Puerta School
16664.000.000

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
423295-005	4-pt composite 01-FS-01, 02, 05, 06@0
423295-010	4-pt composite 01-FS-01, 02, 05, 06@3
423295-015	4-pt composite 01-FS-03, 04, 08, 09@0
423295-020	4-pt composite 01-FS-03, 04, 08, 09@3
423295-025	4-pt composite 01-FS-07, 10, 11, 12@0
423295-030	4-pt composite 01-FS-07, 10, 11, 12@3
423295-035	4-pt composite 01-FS-13, 14, 15, 16@0
423295-040	4-pt composite 01-FS-13, 14, 15, 16@3
423295-041	01-FAST-01@1
423295-042	01-FAST-01@2.5
423295-043	01-FAST-01@5
423295-044	01-FAST-01@10
423295-045	01-FAST-02@1
423295-046	01-FAST-02@2.5
423295-047	01-FAST-02@5
423295-048	01-FAST-02@10

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

The reports of the Enthalpy Analytical, Inc. are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.



Detections Summary

Sample #: 423295-005 **Client Sample #:** 4-pt composite 01-FS-01, 02, 05,

No analyte detected

Sample #: 423295-010 **Client Sample #:** 4-pt composite 01-FS-01, 02, 05,

No analyte detected

Sample #: 423295-015 **Client Sample #:** 4-pt composite 01-FS-03, 04, 08,

No analyte detected

Sample #: 423295-020 **Client Sample #:** 4-pt composite 01-FS-03, 04, 08,

No analyte detected

Sample #: 423295-025 **Client Sample #:** 4-pt composite 01-FS-07, 10, 11,

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8081A	4,4'-DDT	5.1	1	5	ug/Kg	

Sample #: 423295-030 **Client Sample #:** 4-pt composite 01-FS-07, 10, 11,

No analyte detected

Sample #: 423295-035 **Client Sample #:** 4-pt composite 01-FS-13, 14, 15,

No analyte detected

Sample #: 423295-040 **Client Sample #:** 4-pt composite 01-FS-13, 14, 15,

No analyte detected

Sample #: 423295-041 **Client Sample #:** 01-FAST-01@1

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	2.66	1	1	mg/Kg	

Sample #: 423295-042 **Client Sample #:** 01-FAST-01@2.5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	1.40	1	1	mg/Kg	

Sample #: 423295-043 **Client Sample #:** 01-FAST-01@5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	1.63	1	1	mg/Kg	

Sample #: 423295-044 **Client Sample #:** 01-FAST-01@10

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	2.33	1	1	mg/Kg	
EPA 8015M	TPH (C13 to C28) (SGT)	28.1	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	109	1	20	mg/Kg	

Sample #: 423295-045 **Client Sample #:** 01-FAST-02@1

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	6.15	1	1	mg/Kg	
EPA 8015M	TPH (C13 to C28) (SGT)	19.0	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	69.0	1	20	mg/Kg	

Detections Summary

Sample #: 423295-046 **Client Sample #:** 01-FAST-02@2.5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	4.31	1	1	mg/Kg	

Sample #: 423295-047 **Client Sample #:** 01-FAST-02@5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	3.57	1	1	mg/Kg	

Sample #: 423295-048 **Client Sample #:** 01-FAST-02@10

No analyte detected

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-005</u>	Client Sample #: 4-pt composite 01-FS-01, 02, 05, 06	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213158				
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
a-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Aldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
b-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/04/20	MTS
d-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/04/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/04/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
<i>Decachlorobiphenyl DCB (SUR)</i>		57		24.4-119.9			
<i>Tetrachloro-m-xylene TCMX (SUR)</i>		65		50-150			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-010</u>	Client Sample #: 4-pt composite 01-FS-01, 02, 05, 06	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213158				
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
a-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Aldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
b-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/04/20	MTS
d-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/04/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/04/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
<i>Decachlorobiphenyl DCB (SUR)</i>		57		24.4-119.9			
<i>Tetrachloro-m-xylene TCMX (SUR)</i>		65		50-150			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-015</u>	Client Sample #: 4-pt composite 01-FS-03, 04, 08, 09	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213158				
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
a-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Aldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
b-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/04/20	MTS
d-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/04/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/04/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
<i>Decachlorobiphenyl DCB (SUR)</i>		57		24.4-119.9			
<i>Tetrachloro-m-xylene TCMX (SUR)</i>		63		50-150			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-020</u>	Client Sample #: 4-pt composite 01-FS-03, 04, 08, 09	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213158				
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
a-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Aldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
b-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/04/20	MTS
d-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/04/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/04/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
<i>Decachlorobiphenyl DCB (SUR)</i>		52		24.4-119.9			
<i>Tetrachloro-m-xylene TCMX (SUR)</i>		62		50-150			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-025</u>	Client Sample #: 4-pt composite 01-FS-07, 10, 11, 12	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213158				
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
4,4'-DDT	5.1	1	5	ug/Kg	01/02/20	01/04/20	MTS
a-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Aldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
b-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/04/20	MTS
d-BHC	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/04/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/04/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/04/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>		
Decachlorobiphenyl DCB (SUR)		56		24.4-119.9			
Tetrachloro-m-xylene TCMX (SUR)		69		50-150			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-030</u>	Client Sample #: 4-pt composite 01-FS-07, 10, 11, 12	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213248				
4,4'-DDD	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
a-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Aldrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
b-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/06/20	01/08/20	MTS
d-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/06/20	01/08/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/06/20	01/08/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>		
Decachlorobiphenyl DCB (SUR)		69		24.4-119.9			
Tetrachloro-m-xylene TCMX (SUR)		71		50-150			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-035</u>	Client Sample #: 4-pt composite 01-FS-13, 14, 15, 16	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213248				
4,4'-DDD	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
a-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Aldrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
b-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/06/20	01/08/20	MTS
d-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/06/20	01/08/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/06/20	01/08/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>			
Decachlorobiphenyl DCB (SUR)		57	24.4-119.9				
Tetrachloro-m-xylene TCMX (SUR)		45	50-150	S			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019	Site:	
Sample #: <u>423295-040</u>	Client Sample #: 4-pt composite 01-FS-13, 14, 15, 16	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213248				
4,4'-DDD	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
4,4'-DDE	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
a-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Aldrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
b-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/06/20	01/08/20	MTS
d-BHC	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/06/20	01/08/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/06/20	01/08/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/06/20	01/08/20	MTS
<u>Surrogate</u>		<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>			
Decachlorobiphenyl DCB (SUR)		65	24.4-119.9				
Tetrachloro-m-xylene TCMX (SUR)		62	50-150				

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:15	Site:	
Sample #: <u>423295-041</u>	Client Sample #: 01-FAST-01@1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B		QCBatchID: QC1213108				
Arsenic	2.66	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209900				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	100		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213242				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	105		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213082				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:15	Site:	
Sample #: <u>423295-041</u>	Client Sample #: 01-FAST-01@1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		98		66.7-166.6			
4-Bromofluorobenzene (SUR)		101		70-145			
Dibromofluoromethane (SUR)		99		70-145			
Toluene-d8 (SUR)		100		70-145			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:20	Site:	
Sample #: <u>423295-042</u>	Client Sample #: 01-FAST-01@2.5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B					QCBatchID: QC1213108	
Arsenic	1.40	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030					QCBatchID: QC1209900	
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>				<u>Notes</u>
4-Bromofluorobenzene (SUR)	65		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A					QCBatchID: QC1213242	
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>				<u>Notes</u>
Triacontane (SUR)	68		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030					QCBatchID: QC1213082	
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:20	Site:	
Sample #: <u>423295-042</u>	Client Sample #: 01-FAST-01@2.5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		103		66.7-166.6			
4-Bromofluorobenzene (SUR)		119		70-145			
Dibromofluoromethane (SUR)		102		70-145			
Toluene-d8 (SUR)		104		70-145			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:25	Site:	
Sample #: <u>423295-043</u>	Client Sample #: 01-FAST-01@5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B					QCBatchID: QC1213108	
Arsenic	1.63	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030					QCBatchID: QC1209900	
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A					QCBatchID: QC1213242	
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	00		50-150	S			sample difficult to filter through Silica gel. i
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030					QCBatchID: QC1213082	
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:25	Site:	
Sample #: <u>423295-043</u>	Client Sample #: 01-FAST-01@5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>			
1,2-Dichloroethane-d4 (SUR)		100	66.7-166.6				
4-Bromofluorobenzene (SUR)		107	70-145				
Dibromofluoromethane (SUR)		102	70-145				
Toluene-d8 (SUR)		101	70-145				

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:35	Site:	
Sample #: <u>423295-044</u>	Client Sample #: 01-FAST-01@10	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B					QCBatchID: QC1213108	
Arsenic	2.33	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030					QCBatchID: QC1209900	
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>		
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A					QCBatchID: QC1213242	
TPH (C13 to C28) (SGT)	28.1	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	109	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>		
Triacotane (SUR)	67		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030					QCBatchID: QC1213082	
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:35	Site:	
Sample #: <u>423295-044</u>	Client Sample #: 01-FAST-01@10	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		98		66.7-166.6			
4-Bromofluorobenzene (SUR)		102		70-145			
Dibromofluoromethane (SUR)		97		70-145			
Toluene-d8 (SUR)		100		70-145			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:45	Site:	
Sample #: <u>423295-045</u>	Client Sample #: 01-FAST-02@1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B		QCBatchID: QC1213108				
Arsenic	6.15	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209900				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	90		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213242				
TPH (C13 to C28) (SGT)	19.0	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	69.0	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	110		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213082				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:45	Site:	
Sample #: <u>423295-045</u>	Client Sample #: 01-FAST-02@1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		95		66.7-166.6			
4-Bromofluorobenzene (SUR)		103		70-145			
Dibromofluoromethane (SUR)		99		70-145			
Toluene-d8 (SUR)		101		70-145			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:47	Site:	
Sample #: 423295-046	Client Sample #: 01-FAST-02@2.5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B		QCBatchID: QC1213108				
Arsenic	4.31	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209900				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213242				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacotane (SUR)	121		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213082				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:47	Site:	
Sample #: 423295-046	Client Sample #: 01-FAST-02@2.5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		96		66.7-166.6			
4-Bromofluorobenzene (SUR)		101		70-145			
Dibromofluoromethane (SUR)		100		70-145			
Toluene-d8 (SUR)		98		70-145			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:53	Site:	
Sample #: <u>423295-047</u>	Client Sample #: 01-FAST-02@5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B		QCBatchID: QC1213108				
Arsenic	3.57	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209900				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213242				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	107		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213082				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:53	Site:	
Sample #: <u>423295-047</u>	Client Sample #: 01-FAST-02@5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		99		66.7-166.6			
4-Bromofluorobenzene (SUR)		100		70-145			
Dibromofluoromethane (SUR)		100		70-145			
Toluene-d8 (SUR)		97		70-145			

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:57	Site:	
Sample #: <u>423295-048</u>	Client Sample #: 01-FAST-02@10	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B		QCBatchID: QC1213108				
Arsenic	ND	1	1	mg/Kg		01/07/20	SBW
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209900				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/31/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	100		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213242				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg	01/06/20	01/07/20	MTS
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg	01/06/20	01/07/20	MTS
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacotane (SUR)	56		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213082				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/31/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/31/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/31/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/31/19	ZZ
Acetone	ND	1	100	ug/Kg		12/31/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Benzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/31/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/31/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/31/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/31/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector:
Sampled: 12/30/2019 07:57	Site:	
Sample #: 423295-048	Client Sample #: 01-FAST-02@10	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Dibromomethane	ND	1	5	ug/Kg		12/31/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/31/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/31/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/31/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/31/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Styrene	ND	1	5	ug/Kg		12/31/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/31/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Toluene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/31/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/31/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/31/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/31/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/31/19	ZZ
<u>Surrogate</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>	
1,2-Dichloroethane-d4 (SUR)		99		66.7-166.6			
4-Bromofluorobenzene (SUR)		101		70-145			
Dibromofluoromethane (SUR)		101		70-145			
Toluene-d8 (SUR)		98		70-145			

QC BatchID: QC1209900	Analyst: sandyw	Method: EPA 8015B
Matrix: Solid	Analyzed: 12/31/2019	Instrument: VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1209900MB1				
TPH (C6 to C12)	ND	mg/Kg	3	
TPH Gasoline	ND	mg/Kg	3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1209900LCS1											
TPH Gasoline	5		5.5		mg/Kg	110			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1209900MS1, QC1209900MSD1												
TPH Gasoline	ND	5	5	4.8	4.8	mg/Kg	96	96	0.0	70-130	20	

QCBatchID: **QC1213082**

Analyst: nicollez

Method: EPA 8260B

Matrix: Solid

Analyzed: 12/31/2019

Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213082MB1				
1,1,1,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,1-Trichloroethane	ND	ug/Kg	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,2-Trichloroethane	ND	ug/Kg	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	5	
1,1-Dichloroethane	ND	ug/Kg	5	
1,1-Dichloroethene	ND	ug/Kg	5	
1,1-Dichloropropene	ND	ug/Kg	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	5	
1,2,3-Trichloropropane	ND	ug/Kg	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	5	
1,2-Dibromoethane	ND	ug/Kg	5	
1,2-Dichlorobenzene	ND	ug/Kg	5	
1,2-Dichloroethane	ND	ug/Kg	5	
1,2-Dichloropropane	ND	ug/Kg	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	5	
1,3-Dichlorobenzene	ND	ug/Kg	5	
1,3-Dichloropropane	ND	ug/Kg	5	
1,4-Dichlorobenzene	ND	ug/Kg	5	
2,2-Dichloropropane	ND	ug/Kg	5	
2-Butanone (MEK)	ND	ug/Kg	100	
2-Chlorotoluene	ND	ug/Kg	5	
4-Chlorotoluene	ND	ug/Kg	5	
4-Isopropyltoluene	ND	ug/Kg	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	5	
Acetone	ND	ug/Kg	100	
Allyl Chloride	ND	ug/Kg	5	
Benzene	ND	ug/Kg	5	
Bromobenzene	ND	ug/Kg	5	
Bromochloromethane	ND	ug/Kg	5	
Bromodichloromethane	ND	ug/Kg	5	
Bromoform	ND	ug/Kg	5	
Bromomethane	ND	ug/Kg	5	
Carbon Tetrachloride	ND	ug/Kg	5	
Chlorobenzene	ND	ug/Kg	5	
Chlorodibromomethane	ND	ug/Kg	5	
Chloroethane	ND	ug/Kg	5	
Chloroform	ND	ug/Kg	5	
Chloromethane	ND	ug/Kg	5	
cis-1,2-Dichloroethene	ND	ug/Kg	5	
cis-1,3-dichloropropene	ND	ug/Kg	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	5	
Dibromomethane	ND	ug/Kg	5	
Dichlorodifluoromethane	ND	ug/Kg	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	5	
Ethylbenzene	ND	ug/Kg	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	5	
Hexachlorobutadiene	ND	ug/Kg	5	
Isopropylbenzene	ND	ug/Kg	5	
m and p-Xylene	ND	ug/Kg	5	

QCBatchID: QC1213082	Analyst: nicollez	Method: EPA 8260B
Matrix: Solid	Analyzed: 12/31/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	RDL	Notes
QC1213082MB1				
Methylene chloride	ND	ug/Kg	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	5	
Naphthalene	ND	ug/Kg	5	
N-butylbenzene	ND	ug/Kg	5	
N-propylbenzene	ND	ug/Kg	5	
o-Xylene	ND	ug/Kg	5	
Sec-butylbenzene	ND	ug/Kg	5	
Styrene	ND	ug/Kg	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	5	
Tert-butylbenzene	ND	ug/Kg	5	
Tetrachloroethene	ND	ug/Kg	5	
Toluene	ND	ug/Kg	5	
trans-1,2-dichloroethene	ND	ug/Kg	5	
trans-1,3-dichloropropene	ND	ug/Kg	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	5	
Trichloroethene	ND	ug/Kg	5	
Trichlorofluoromethane	ND	ug/Kg	5	
Vinyl Chloride	ND	ug/Kg	5	
Xylenes (Total)	ND	ug/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213082LCS1											
1,1-Dichloroethene	50		62		ug/Kg	124			59-172		
Benzene	50		59		ug/Kg	118			62-137		
Chlorobenzene	50		60		ug/Kg	120			60-133		
Methyl-t-butyl Ether (MTBE)	50		53		ug/Kg	106			62-137		
Toluene	50		60		ug/Kg	120			59-139		
Trichloroethene	50		59		ug/Kg	118			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213082MS1, QC1213082MSD1												
Source: 423329-002												
1,1-Dichloroethene	ND	50	50	65	60	ug/Kg	130	120	8.0	59-172	22	
Benzene	ND	50	50	58	55	ug/Kg	116	110	5.3	62-137	24	
Chlorobenzene	ND	50	50	57	54	ug/Kg	114	108	5.4	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	51	51	ug/Kg	102	102	0.0	62-137	21	
Toluene	ND	50	50	57	55	ug/Kg	114	110	3.6	59-139	21	
Trichloroethene	ND	50	50	56	54	ug/Kg	112	108	3.6	66-142	21	

QC BatchID: QC1213108	Analyst: rvenegas	Method: EPA 6010B
Matrix: Solid	Analyzed: 12/31/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213108MB1				
Antimony	ND	mg/Kg	3	
Arsenic	ND	mg/Kg	1	
Barium	ND	mg/Kg	1	
Beryllium	ND	mg/Kg	0.5	
Cadmium	ND	mg/Kg	0.5	
Chromium	ND	mg/Kg	1	
Cobalt	ND	mg/Kg	0.5	
Copper	ND	mg/Kg	1	
Lead	ND	mg/Kg	1	
Molybdenum	ND	mg/Kg	1	
Nickel	ND	mg/Kg	1.5	
Selenium	ND	mg/Kg	3	
Silver	ND	mg/Kg	0.5	
Thallium	ND	mg/Kg	3	
Vanadium	ND	mg/Kg	0.5	
Zinc	ND	mg/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes	
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD		
QC1213108LCS1												
Antimony	100		128		mg/Kg	128			80-120		L	
Arsenic	100		96.9		mg/Kg	97			80-120			
Barium	100		106		mg/Kg	106			80-120			
Beryllium	100		95.5		mg/Kg	96			80-120			
Cadmium	100		99.1		mg/Kg	99			80-120			
Chromium	100		96.5		mg/Kg	97			80-120			
Cobalt	100		104		mg/Kg	104			80-120			
Copper	100		98.1		mg/Kg	98			80-120			
Lead	100		102		mg/Kg	102			80-120			
Molybdenum	100		96.1		mg/Kg	96			80-120			
Nickel	100		108		mg/Kg	108			80-120			
Selenium	100		86.9		mg/Kg	87			80-120			
Silver	100		93.0		mg/Kg	93			80-120			
Thallium	100		100		mg/Kg	100			80-120			
Vanadium	100		98.0		mg/Kg	98			80-120			
Zinc	100		103		mg/Kg	103			80-120			

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213108MS1, QC1213108MSD1												
Antimony	ND	100	100	61.7	69.8	mg/Kg	62	70	12.3	75-125	20	M
Arsenic	1.27	100	100	103	110	mg/Kg	102	109	6.6	75-125	20	
Barium	94.7	100	100	261	271	mg/Kg	166	176	3.8	75-125	20	M
Beryllium	ND	100	100	98.2	105	mg/Kg	98	105	6.7	75-125	20	
Cadmium	0.53	100	100	102	110	mg/Kg	101	109	7.5	75-125	20	
Chromium	7.38	100	100	112	117	mg/Kg	105	110	4.4	75-125	20	
Cobalt	6.60	100	100	113	123	mg/Kg	106	116	8.5	75-125	20	
Copper	5.74	100	100	112	113	mg/Kg	106	107	0.9	75-125	20	
Lead	7.40	100	100	112	121	mg/Kg	105	114	7.7	75-125	20	
Molybdenum	1.30	100	100	98.6	106	mg/Kg	97	105	7.2	75-125	20	

QCBatchID: QC1213108**Analyst: rvenegas****Method: EPA 6010B****Matrix: Solid****Analyzed: 12/31/2019****Instrument: AAICP (group)**

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213108MS1, QC1213108MSD1											Source: 423329-001	
Nickel	5.06	100	100	115	122	mg/Kg	110	117	5.9	75-125	20	
Selenium	1.56	100	100	97.0	104	mg/Kg	95	102	7.0	75-125	20	
Silver	ND	100	100	95.7	102	mg/Kg	96	102	6.4	75-125	20	
Thallium	ND	100	100	96.4	105	mg/Kg	96	105	8.5	75-125	20	
Vanadium	20.5	100	100	138	147	mg/Kg	118	127	6.3	75-125	20	M
Zinc	31.3	100	100	144	151	mg/Kg	113	120	4.7	75-125	20	

QCBatchID: QC1213158	Analyst: bmorris	Method: EPA 8081A
Matrix: Solid	Analyzed: 01/02/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213158MB1				
4,4'-DDD	ND	ug/Kg	5	
4,4'-DDE	ND	ug/Kg	5	
4,4'-DDT	ND	ug/Kg	5	
a-BHC	ND	ug/Kg	5	
Aldrin	ND	ug/Kg	5	
b-BHC	ND	ug/Kg	5	
Chlordane (technical)	ND	ug/Kg	50	
d-BHC	ND	ug/Kg	5	
Dieldrin	ND	ug/Kg	5	
Endosulfan I	ND	ug/Kg	5	
Endosulfan II	ND	ug/Kg	5	
Endosulfan sulfate	ND	ug/Kg	5	
Endrin	ND	ug/Kg	5	
Endrin aldehyde	ND	ug/Kg	5	
Endrin Ketone	ND	ug/Kg	5	
Heptachlor	ND	ug/Kg	5	
Heptachlor epoxide	ND	ug/Kg	5	
Lindane (Gamma-BHC)	ND	ug/Kg	5	
Methoxychlor	ND	ug/Kg	10	
Toxaphene	ND	ug/Kg	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213158LCS1											
4,4'-DDD	50		55		ug/Kg	110			43-172		
4,4'-DDE	50		56		ug/Kg	112			44-163		
4,4'-DDT	50		62		ug/Kg	124			40-158		
a-BHC	50		58		ug/Kg	116			45-150		
Aldrin	50		54		ug/Kg	108			46-142		
b-BHC	50		54		ug/Kg	108			42-156		
d-BHC	50		60		ug/Kg	120			37-161		
Dieldrin	50		53		ug/Kg	106			47-151		
Endosulfan I	50		54		ug/Kg	108			47-141		
Endosulfan II	50		53		ug/Kg	106			44-156		
Endosulfan sulfate	50		55		ug/Kg	110			43-157		
Endrin	50		57		ug/Kg	114			47-160		
Endrin aldehyde	50		40		ug/Kg	80			32-127		
Endrin Ketone	50		52		ug/Kg	104			48-159		
Heptachlor	50		50		ug/Kg	100			50-144		
Heptachlor epoxide	50		52		ug/Kg	104			48-145		
Lindane (Gamma-BHC)	50		59		ug/Kg	118			47-151		
Methoxychlor	50		64		ug/Kg	128			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213158MS1, QC1213158MSD1												
4,4'-DDD	ND	50	50	55	52	ug/Kg	110	104	5.6	43-172	20	
4,4'-DDE	ND	50	50	59	54	ug/Kg	118	108	8.8	44-163	20	
4,4'-DDT	ND	50	50	65	61	ug/Kg	130	122	6.3	40-158	20	
a-BHC	ND	50	50	57	55	ug/Kg	114	110	3.6	45-150	20	

QCBatchID: **QC1213158**

Analyst: bmorris

Method: EPA 8081A

Matrix: Solid

Analyzed: 01/02/2020

Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213158MS1, QC1213158MSD1											Source: 423096-017	
Aldrin	ND	50	50	54	51	ug/Kg	108	102	5.7	46-142	20	
b-BHC	ND	50	50	52	50	ug/Kg	104	100	3.9	42-156	20	
d-BHC	ND	50	50	60	58	ug/Kg	120	116	3.4	37-161	20	
Dieldrin	ND	50	50	53	51	ug/Kg	106	102	3.8	47-151	20	
Endosulfan I	ND	50	50	54	51	ug/Kg	108	102	5.7	47-141	20	
Endosulfan II	ND	50	50	54	51	ug/Kg	108	102	5.7	44-156	20	
Endosulfan sulfate	ND	50	50	55	52	ug/Kg	110	104	5.6	43-157	20	
Endrin	ND	50	50	57	54	ug/Kg	114	108	5.4	47-160	20	
Endrin aldehyde	ND	50	50	43	41	ug/Kg	86	82	4.8	32-127	20	
Endrin Ketone	ND	50	50	52	49	ug/Kg	104	98	5.9	48-159	20	
Heptachlor	ND	50	50	50	48	ug/Kg	100	96	4.1	50-144	20	
Heptachlor epoxide	ND	50	50	51	49	ug/Kg	102	98	4.0	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	57	55	ug/Kg	114	110	3.6	47-151	20	
Methoxychlor	ND	50	50	66	63	ug/Kg	132	126	4.7	36-182	20	

QCBatchID: QC1213242	Analyst: bmorris	Method: EPA 8015M
Matrix: Solid	Analyzed: 01/06/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213242MB1				
TPH (C10 to C28) (SGT)	ND	mg/Kg	10	
TPH (C13 to C28) (SGT)	ND	mg/Kg	10	
TPH (C29 to C 40) (SGT)	ND	mg/Kg	20	
TPH (C6 to C12) (SGT)	ND	mg/Kg	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213242LCS1											
TPH (C10 to C28) (SGT)	250		202		mg/Kg	81			36-138		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213242MS1, QC1213242MSD1												
TPH (C10 to C28) (SGT)	ND	250	250	328	349	mg/Kg	131	140	6.2	70-130	30	M

Source: 423295-042

QCBatchID: QC1213248	Analyst: bmorris	Method: EPA 8081A
Matrix: Solid	Analyzed: 01/06/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213248MB1				
4,4'-DDD	ND	ug/Kg	5	
4,4'-DDE	ND	ug/Kg	5	
4,4'-DDT	ND	ug/Kg	5	
a-BHC	ND	ug/Kg	5	
Aldrin	ND	ug/Kg	5	
b-BHC	ND	ug/Kg	5	
Chlordane (technical)	ND	ug/Kg	50	
d-BHC	ND	ug/Kg	5	
Dieldrin	ND	ug/Kg	5	
Endosulfan I	ND	ug/Kg	5	
Endosulfan II	ND	ug/Kg	5	
Endosulfan sulfate	ND	ug/Kg	5	
Endrin	ND	ug/Kg	5	
Endrin aldehyde	ND	ug/Kg	5	
Endrin Ketone	ND	ug/Kg	5	
Heptachlor	ND	ug/Kg	5	
Heptachlor epoxide	ND	ug/Kg	5	
Lindane (Gamma-BHC)	ND	ug/Kg	5	
Methoxychlor	ND	ug/Kg	10	
Toxaphene	ND	ug/Kg	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213248LCS1											
4,4'-DDD	50		40		ug/Kg	80			43-172		
4,4'-DDE	50		42		ug/Kg	84			44-163		
4,4'-DDT	50		47		ug/Kg	94			40-158		
a-BHC	50		45		ug/Kg	90			45-150		
Aldrin	50		38		ug/Kg	76			46-142		
b-BHC	50		38		ug/Kg	76			42-156		
d-BHC	50		41		ug/Kg	82			37-161		
Dieldrin	50		41		ug/Kg	82			47-151		
Endosulfan I	50		42		ug/Kg	84			47-141		
Endosulfan II	50		40		ug/Kg	80			44-156		
Endosulfan sulfate	50		41		ug/Kg	82			43-157		
Endrin	50		44		ug/Kg	88			47-160		
Endrin aldehyde	50		30		ug/Kg	60			32-127		
Endrin Ketone	50		39		ug/Kg	78			48-159		
Heptachlor	50		40		ug/Kg	80			50-144		
Heptachlor epoxide	50		39		ug/Kg	78			48-145		
Lindane (Gamma-BHC)	50		43		ug/Kg	86			47-151		
Methoxychlor	50		50		ug/Kg	100			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213248MS1, QC1213248MSD1												
4,4'-DDD	ND	50	50	33	37	ug/Kg	66	74	11.4	43-172	20	
4,4'-DDE	ND	50	50	35	39	ug/Kg	70	78	10.8	44-163	20	
4,4'-DDT	ND	50	50	38	44	ug/Kg	76	88	14.6	40-158	20	
a-BHC	ND	50	50	39	42	ug/Kg	78	84	7.4	45-150	20	

Source: 423295-030

QCBatchID: QC1213248	Analyst: bmorris	Method: EPA 8081A
Matrix: Solid	Analyzed: 01/06/2020	Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213248MS1, QC1213248MSD1											Source: 423295-030	
Aldrin	ND	50	50	33	35	ug/Kg	66	70	5.9	46-142	20	
b-BHC	ND	50	50	36	36	ug/Kg	72	72	0.0	42-156	20	
d-BHC	ND	50	50	35	39	ug/Kg	70	78	10.8	37-161	20	
Dieldrin	ND	50	50	34	37	ug/Kg	68	74	8.5	47-151	20	
Endosulfan I	ND	50	50	35	38	ug/Kg	70	76	8.2	47-141	20	
Endosulfan II	ND	50	50	33	37	ug/Kg	66	74	11.4	44-156	20	
Endosulfan sulfate	ND	50	50	38	44	ug/Kg	76	88	14.6	43-157	20	
Endrin	ND	50	50	36	40	ug/Kg	72	80	10.5	47-160	20	
Endrin aldehyde	ND	50	50	26	30	ug/Kg	52	60	14.3	32-127	20	
Endrin Ketone	ND	50	50	31	35	ug/Kg	62	70	12.1	48-159	20	
Heptachlor	ND	50	50	35	37	ug/Kg	70	74	5.6	50-144	20	
Heptachlor epoxide	ND	50	50	33	37	ug/Kg	66	74	11.4	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	37	39	ug/Kg	74	78	5.3	47-151	20	
Methoxychlor	ND	50	50	38	43	ug/Kg	76	86	12.3	36-182	20	


Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL			Chain of Custody Record		Turn Around Time (Rush by advanced notice only)						
931 W. Barkley Ave., Orange, CA 92868			Lab No: 423295	Standard: <input checked="" type="checkbox"/>			4 Day: <input type="checkbox"/>	3 Day: <input type="checkbox"/>			
Phone: (714) 771-6900 Fax: (714) 538-1209			Page: 1 of 45	2 Day: <input type="checkbox"/>			1 Day: <input type="checkbox"/>	Same Day: <input type="checkbox"/>			
Billing: Enthalpy Analytical 1 Park Plaza, Suite 1000 Irvine, CA 92614		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = Na ₂ S ₂ O ₃ 2 = HCl 3 = HNO ₃ 4 = H ₂ SO ₄ 5 = NaOH 6 = Other					

CUSTOMER INFORMATION				PROJECT INFORMATION				Analysis Request												Test Instructions / Comments
Company:	ENGEO			Name:	Former La Puerta School			Method 8081 - OCPs												silica gel cleanup
Report To:	Adrianna Lundberg			Number:	Northern Area, Former Structures															
Email:	alundberg@engeo.com			P.O. #:	16664.000.000															
Address:	6 Morgan Suite 162			Address:	2475 Forbes Ave															
	Irvine, CA				Claremont, CA															
Phone:	949.579.2268			Global ID:																
Fax:				Sampled By:	Emma Griffie															
Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.															
1	01-FS-01@0	12/30/19	1018	soil	1 / 2x6	-	X													
2	01-FS-02@0	12/30/19	0906	soil	1 / 2x6	-	X													
3	01-FS-05@0	12/30/19	0913	soil	1 / 2x6	-	X													
4	01-FS-06@0	12/30/19	1003	soil	1 / 2x6	-	X												4-pt composite for OCPs	
5							X													
6	01-FS-01@3	12/30/19	1016	soil	1 / 2x6	-	X													
7	01-FS-02@3	12/30/19	0904	soil	1 / 2x6	-	X													
8	01-FS-05@3	12/30/19	0910	soil	1 / 2x6	-	X													
9	01-FS-06@3	12/30/19	1005	soil	1 / 2x6	-	X													
10							X													

	Signature	Print Name	Company / Title	Date / Time
¹ Relinquished By:	<i>Emma Z Griffie</i>	Emma Griffie	ENGEO / Staff Geologist	12/30/2019 @ 1204.
¹ Received By:	<i>Christine C.</i>	Christine C.	EA	12/30/19 1205
² Relinquished By:				
² Received By:				
³ Relinquished By:				
³ Received By:				



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Engel
Date Received: 12/30/19

Project: Former La Puente School
Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? _____ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 12.9 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____

Cooler Temp (°C): #1: 12.8 #2: _____ #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: [Signature] Date: 12/30/19

APPENDIX B

**Laboratory Analytical Report
Existing Stockpile – Southwest Area**

Enthalpy Analytical, LLC



Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com



Client: ENGEO Inc.
Address: 6 Morgan, Suite 162
Irvine, CA 92618-1922

Lab Request: 423106
Report Date: 01/07/2020
Date Received: 12/23/2019
Client ID: 15790

Attn: Adrianna Lundberg

Comments: Former La Puerta School
16664.000.000

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample # Client Sample ID

- 423106-001 01-SP-A3
- 423106-002 01-SP-A4
- 423106-003 01-SP-A5
- 423106-004 01-SP-B3
- 423106-005 4-pt comp 01-SP-A3,
A4, A5, B3
- 423106-006 01-SP-B1
- 423106-007 01-SP-B2
- 423106-008 01-SP-C1
- 423106-009 01-SP-C2
- 423106-010 4-pt comp 01-SP-B1,
B2, C1, C2
- 423106-011 01-SP-B4
- 423106-012 01-SP-B5
- 423106-013 01-SP-C4
- 423106-014 01-SP-C5
- 423106-015 4-pt comp 01-SP-B4,
B5, C4, C5
- 423106-016 01-SP-C3
- 423106-017 01-SP-D2
- 423106-018 01-SP-D3
- 423106-019 01-SP-D4
- 423106-020 4-pt comp 01-SP-C3,
D2, D3, D4

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Detections Summary

Sample #: 423106-001 **Client Sample #:** 01-SP-A3

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8015M	TPH (C13 to C28) (SGT)	36.0	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	38.4	1	20	mg/Kg	

Sample #: 423106-002 **Client Sample #:** 01-SP-A4

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Dibenz(a,h)anthracene	10	1	10	ug/Kg	

Sample #: 423106-003 **Client Sample #:** 01-SP-A5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Dibenz(a,h)anthracene	10	1	10	ug/Kg	

Sample #: 423106-004 **Client Sample #:** 01-SP-B3

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Dibenz(a,h)anthracene	10	1	10	ug/Kg	

Sample #: 423106-005 **Client Sample #:** 4-pt comp 01-SP-A3, A4, A5, B3

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	4.13	1	1	mg/Kg	
EPA 6010B	Barium	54.1	1	1	mg/Kg	
EPA 6010B	Chromium	14.4	1	1	mg/Kg	
EPA 6010B	Cobalt	7.39	1	0.5	mg/Kg	
EPA 6010B	Copper	12.8	1	1	mg/Kg	
EPA 6010B	Lead	13.2	1	1	mg/Kg	
EPA 6010B	Molybdenum	1.11	1	1	mg/Kg	
EPA 6010B	Nickel	9.47	1	1.5	mg/Kg	
EPA 6010B	Vanadium	23.5	1	0.5	mg/Kg	
EPA 6010B	Zinc	50.4	1	5	mg/Kg	

Sample #: 423106-006 **Client Sample #:** 01-SP-B1

No analyte detected

Sample #: 423106-007 **Client Sample #:** 01-SP-B2

No analyte detected

Sample #: 423106-008 **Client Sample #:** 01-SP-C1

No analyte detected

Sample #: 423106-009 **Client Sample #:** 01-SP-C2

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8015M	TPH (C13 to C28) (SGT)	17.8	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	29.2	1	20	mg/Kg	
EPA 8270CM	Dibenz(a,h)anthracene	51	5	50	ug/Kg	D2

Sample #: 423106-010 **Client Sample #:** 4-pt comp 01-SP-B1, B2, C1, C2

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	2.65	1	1	mg/Kg	
EPA 6010B	Barium	65.6	1	1	mg/Kg	
EPA 6010B	Cadmium	0.69	1	0.5	mg/Kg	
EPA 6010B	Chromium	13.1	1	1	mg/Kg	
EPA 6010B	Cobalt	7.42	1	0.5	mg/Kg	

Detections Summary

Sample #: 423106-010 **Client Sample #:** 4-pt comp 01-SP-B1, B2, C1, C2

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Copper	13.6	1	1	mg/Kg	
EPA 6010B	Lead	5.79	1	1	mg/Kg	
EPA 6010B	Nickel	11.5	1	1.5	mg/Kg	
EPA 6010B	Vanadium	25.1	1	0.5	mg/Kg	
EPA 6010B	Zinc	45.2	1	5	mg/Kg	

Sample #: 423106-011 **Client Sample #:** 01-SP-B4

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Dibenz(a,h)anthracene	10	1	10	ug/Kg	

Sample #: 423106-012 **Client Sample #:** 01-SP-B5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Anthracene	59	5	50	ug/Kg	
EPA 8270CM	Benz(a)anthracene	370	5	50	ug/Kg	
EPA 8270CM	Benzo(a)pyrene	290	5	50	ug/Kg	
EPA 8270CM	Benzo(b)fluoranthene	290	5	50	ug/Kg	
EPA 8270CM	Benzo(g,h,i)perylene	85	5	50	ug/Kg	
EPA 8270CM	Benzo(k)fluoranthene	250	5	50	ug/Kg	
EPA 8270CM	Chrysene	320	5	50	ug/Kg	
EPA 8270CM	Dibenz(a,h)anthracene	69	5	50	ug/Kg	
EPA 8270CM	Fluoranthene	710	5	50	ug/Kg	
EPA 8270CM	Indeno(1,2,3-cd)pyrene	120	5	50	ug/Kg	
EPA 8270CM	Phenanthrene	250	5	50	ug/Kg	
EPA 8270CM	Pyrene	570	5	50	ug/Kg	

Sample #: 423106-013 **Client Sample #:** 01-SP-C4

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Dibenz(a,h)anthracene	10	1	10	ug/Kg	

Sample #: 423106-014 **Client Sample #:** 01-SP-C5

No analyte detected

Sample #: 423106-015 **Client Sample #:** 4-pt comp 01-SP-B4, B5, C4, C5

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Barium	35.8	1	1	mg/Kg	
EPA 6010B	Cadmium	0.68	1	0.5	mg/Kg	
EPA 6010B	Chromium	7.60	1	1	mg/Kg	
EPA 6010B	Cobalt	5.95	1	0.5	mg/Kg	
EPA 6010B	Copper	7.94	1	1	mg/Kg	
EPA 6010B	Lead	4.92	1	1	mg/Kg	
EPA 6010B	Nickel	6.09	1	1.5	mg/Kg	
EPA 6010B	Vanadium	15.2	1	0.5	mg/Kg	
EPA 6010B	Zinc	37.9	1	5	mg/Kg	

Sample #: 423106-016 **Client Sample #:** 01-SP-C3

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Acenaphthene	22	1	10	ug/Kg	
EPA 8270CM	Anthracene	40	1	10	ug/Kg	
EPA 8270CM	Benz(a)anthracene	110	1	10	ug/Kg	
EPA 8270CM	Benzo(a)pyrene	89	1	10	ug/Kg	
EPA 8270CM	Benzo(b)fluoranthene	62	1	10	ug/Kg	
EPA 8270CM	Benzo(g,h,i)perylene	37	1	10	ug/Kg	

Detections Summary

Sample #: 423106-016 **Client Sample #:** 01-SP-C3

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Benzo(k)fluoranthene	74	1	10	ug/Kg	
EPA 8270CM	Chrysene	110	1	10	ug/Kg	
EPA 8270CM	Dibenz(a,h)anthracene	17	1	10	ug/Kg	
EPA 8270CM	Fluoranthene	250	1	10	ug/Kg	
EPA 8270CM	Fluorene	14	1	10	ug/Kg	
EPA 8270CM	Indeno(1,2,3-cd)pyrene	50	1	10	ug/Kg	
EPA 8270CM	Phenanthrene	180	1	10	ug/Kg	
EPA 8270CM	Pyrene	240	1	10	ug/Kg	

Sample #: 423106-017 **Client Sample #:** 01-SP-D2

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Anthracene	17	1	10	ug/Kg	
EPA 8270CM	Benz(a)anthracene	64	1	10	ug/Kg	
EPA 8270CM	Benzo(a)pyrene	55	1	10	ug/Kg	
EPA 8270CM	Benzo(b)fluoranthene	37	1	10	ug/Kg	
EPA 8270CM	Benzo(g,h,i)perylene	22	1	10	ug/Kg	
EPA 8270CM	Benzo(k)fluoranthene	45	1	10	ug/Kg	
EPA 8270CM	Chrysene	64	1	10	ug/Kg	
EPA 8270CM	Dibenz(a,h)anthracene	14	1	10	ug/Kg	
EPA 8270CM	Fluoranthene	120	1	10	ug/Kg	
EPA 8270CM	Indeno(1,2,3-cd)pyrene	29	1	10	ug/Kg	
EPA 8270CM	Phenanthrene	55	1	10	ug/Kg	
EPA 8270CM	Pyrene	120	1	10	ug/Kg	

Sample #: 423106-018 **Client Sample #:** 01-SP-D3

No analyte detected

Sample #: 423106-019 **Client Sample #:** 01-SP-D4

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Dibenz(a,h)anthracene	50	5	50	ug/Kg	D2

Sample #: 423106-020 **Client Sample #:** 4-pt comp 01-SP-C3, D2, D3, D4

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Barium	49.2	1	1	mg/Kg	
EPA 6010B	Cadmium	0.63	1	0.5	mg/Kg	
EPA 6010B	Chromium	23.4	1	1	mg/Kg	
EPA 6010B	Cobalt	8.14	1	0.5	mg/Kg	
EPA 6010B	Copper	47.7	1	1	mg/Kg	
EPA 6010B	Lead	9.64	1	1	mg/Kg	
EPA 6010B	Nickel	12.0	1	1.5	mg/Kg	
EPA 6010B	Vanadium	28.4	1	0.5	mg/Kg	
EPA 6010B	Zinc	51.4	1	5	mg/Kg	
EPA 8081A	4,4'-DDE	9.1	1	5	ug/Kg	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 09:00	Site:	
Sample #: <u>423106-001</u>	Client Sample #: 01-SP-A3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/27/19	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	90		60-140				

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	36.0	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	38.4	1	20	mg/Kg		12/31/19	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacotane (SUR)	91		50-150				

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:00	Site:	
Sample #: 423106-001	Client Sample #: 01-SP-A3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	122	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	109	70-145	
Toluene-d8 (SUR)	87	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
2-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Acenaphthene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Acenaphthylene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Anthracene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Benz(a)anthracene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Benzo(a)pyrene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Benzo(b)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Benzo(g,h,i)perylene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Benzo(k)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Chrysene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	J,D2
Dibenz(a,h)anthracene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Fluoranthene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Fluorene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Naphthalene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Phenanthrene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	D2
Pyrene	ND	5	50	ug/Kg	01/02/20	01/02/20	CBR	J,D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	80	30-120	
Nitrobenzene-d5 (SUR)	98	27-125	
p-Terphenyl (SUR)	109	33-155	

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:10	Site:	
Sample #: <u>423106-002</u>	Client Sample #: 01-SP-A4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	95		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:10	Site:	
Sample #: 423106-002	Client Sample #: 01-SP-A4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ	
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ	
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	96	66.7-166.6	
4-Bromofluorobenzene (SUR)	99	70-145	
Dibromofluoromethane (SUR)	102	70-145	
Toluene-d8 (SUR)	101	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Chrysene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Dibenz(a,h)anthracene	10	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Surrogate	% Recovery	Limits	Notes					
2-Fluorobiphenyl (SUR)	101	30-120						
Nitrobenzene-d5 (SUR)	126	27-125	S					
p-Terphenyl (SUR)	104	33-155						

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:15	Site:	
Sample #: 423106-003	Client Sample #: 01-SP-A5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	110		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:15	Site:	
Sample #: <u>423106-003</u>	Client Sample #: 01-SP-A5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ	
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ	
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ	
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ	J
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ	
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ	
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ	
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ	
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ	
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ	
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ	
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ	
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	125	66.7-166.6	
4-Bromofluorobenzene (SUR)	97	70-145	
Dibromofluoromethane (SUR)	110	70-145	
Toluene-d8 (SUR)	84	70-145	

Method:	EPA 8270CM	Prep Method:	EPA 3545	QC Batch ID:	QC1213147			
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Chrysene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Dibenz(a,h)anthracene	10	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Surrogate		% Recovery		Limits		Notes		
2-Fluorobiphenyl (SUR)		95		30-120				
Nitrobenzene-d5 (SUR)		118		27-125				
p-Terphenyl (SUR)		94		33-155				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 09:25	Site:	
Sample #: 423106-004	Client Sample #: 01-SP-B3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	113		50-150				
Method: EPA 8260B NELAC	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:25	Site:	
Sample #: 423106-004	Client Sample #: 01-SP-B3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ	
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ	
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	97	66.7-166.6	
4-Bromofluorobenzene (SUR)	97	70-145	
Dibromofluoromethane (SUR)	102	70-145	
Toluene-d8 (SUR)	98	70-145	

Method:	EPA 8270CM	Prep Method:	EPA 3545	QCBatchID:	QC1213147			
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Chrysene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Dibenz(a,h)anthracene	10	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Pyrene	ND	1	10	ug/Kg	01/02/20	01/02/20	CBR	J
Surrogate		% Recovery		Limits		Notes		
2-Fluorobiphenyl (SUR)		98		30-120				
Nitrobenzene-d5 (SUR)		122		27-125				
p-Terphenyl (SUR)		93		33-155				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: 423106-005	Client Sample #: 4-pt comp 01-SP-A3, A4, A5, B3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B NELAC		Prep Method: EPA 3050B		QCBatchID: QC1212910			
Antimony	ND	1	3	mg/Kg		12/30/19 SBW	B
Arsenic	4.13	1	1	mg/Kg		12/27/19 SBW	
Barium	54.1	1	1	mg/Kg		12/27/19 SBW	
Beryllium	ND	1	0.5	mg/Kg		12/27/19 SBW	
Cadmium	ND	1	0.5	mg/Kg		12/27/19 SBW	J
Chromium	14.4	1	1	mg/Kg		12/27/19 SBW	
Cobalt	7.39	1	0.5	mg/Kg		12/27/19 SBW	
Copper	12.8	1	1	mg/Kg		12/30/19 SBW	
Lead	13.2	1	1	mg/Kg		12/27/19 SBW	
Molybdenum	1.11	1	1	mg/Kg		12/27/19 SBW	
Nickel	9.47	1	1.5	mg/Kg		12/27/19 SBW	
Selenium	ND	1	3	mg/Kg		12/27/19 SBW	
Silver	ND	1	0.5	mg/Kg		12/27/19 SBW	
Thallium	ND	1	3	mg/Kg		12/27/19 SBW	J
Vanadium	23.5	1	0.5	mg/Kg		12/27/19 SBW	
Zinc	50.4	1	5	mg/Kg		12/27/19 SBW	

Method: EPA 7471A NELAC		Prep Method: EPA 7471A		QCBatchID: QC1213022			
Mercury	ND	1	0.14	mg/Kg	12/29/19	12/30/19 SBW	

Method: EPA 8081A NELAC		Prep Method: EPA 3545		QCBatchID: QC1213156			
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	J
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
a-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Aldrin	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
b-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
d-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endrin	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/03/20 MTS	
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/03/20 MTS	

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	67	24.4-119.9	
Tetrachloro-m-xylene TCMX (SUR)	66	50-150	

Method: EPA 8082 NELAC		Prep Method: EPA 3545		QCBatchID: QC1213157			
PCB-1016	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1221	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1232	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1242	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1248	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1254	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1260	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1262	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1268	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: <u>423106-005</u>	Client Sample #: 4-pt comp 01-SP-A3, A4, A5, B3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Decachlorobiphenyl DCB (SUR)	89		50-150				

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:35	Site:	
Sample #: <u>423106-006</u>	Client Sample #: 01-SP-B1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	111		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:35	Site:	
Sample #: 423106-006	Client Sample #: 01-SP-B1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	102	66.7-166.6	
4-Bromofluorobenzene (SUR)	99	70-145	
Dibromofluoromethane (SUR)	104	70-145	
Toluene-d8 (SUR)	96	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
2-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Acenaphthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Acenaphthylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benz(a)anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(a)pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(b)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(g,h,i)perylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(k)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Chrysene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Dibenz(a,h)anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Fluorene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Naphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Phenanthrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Surrogate	% Recovery	Limits	Notes					
2-Fluorobiphenyl (SUR)	441	30-120	S					
Nitrobenzene-d5 (SUR)	619	27-125	S					
p-Terphenyl (SUR)	492	33-155	S					

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 09:40	Site:	
Sample #: <u>423106-007</u>	Client Sample #: 01-SP-B2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	108		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:40	Site:	
Sample #: <u>423106-007</u>	Client Sample #: 01-SP-B2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	121	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	107	70-145	
Toluene-d8 (SUR)	88	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147					
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR J
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR J
Chrysene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Dibenz(a,h)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Surrogate	% Recovery	Limits	Notes				
2-Fluorobiphenyl (SUR)	82	30-120					
Nitrobenzene-d5 (SUR)	118	27-125					
p-Terphenyl (SUR)	89	33-155					

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 09:50	Site:	
Sample #: 423106-008	Client Sample #: 01-SP-C1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	108		50-150				
Method: EPA 8260B NELAC	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 09:50	Site:	
Sample #: 423106-008	Client Sample #: 01-SP-C1	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	98	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	103	70-145	
Toluene-d8 (SUR)	97	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QCBatchID: QC1213147					
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR S3
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Chrysene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Dibenz(a,h)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR S3
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR S3
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Surrogate	% Recovery	Limits	Notes				
2-Fluorobiphenyl (SUR)	83	30-120					
Nitrobenzene-d5 (SUR)	111	27-125					
p-Terphenyl (SUR)	89	33-155					

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:00	Site:	
Sample #: 423106-009	Client Sample #: 01-SP-C2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	100		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	17.8	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	29.2	1	20	mg/Kg		12/31/19	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	105		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:00	Site:	
Sample #: 423106-009	Client Sample #: 01-SP-C2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	123	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	112	70-145	
Toluene-d8 (SUR)	86	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
2-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Acenaphthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Acenaphthylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benz(a)anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Benzo(a)pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(b)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(g,h,i)perylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Benzo(k)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Chrysene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Dibenz(a,h)anthracene	51	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Fluorene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Naphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Phenanthrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	95	30-120	
Nitrobenzene-d5 (SUR)	132	27-125	S
p-Terphenyl (SUR)	127	33-155	

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: <u>423106-010</u>	Client Sample #: 4-pt comp 01-SP-B1, B2, C1, C2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>		Prep Method: EPA 3050B		QCBatchID: QC1212910			
Antimony	ND	1	3	mg/Kg		12/30/19 SBW	B,J
Arsenic	2.65	1	1	mg/Kg		12/27/19 SBW	
Barium	65.6	1	1	mg/Kg		12/27/19 SBW	
Beryllium	ND	1	0.5	mg/Kg		12/27/19 SBW	
Cadmium	0.69	1	0.5	mg/Kg		12/27/19 SBW	
Chromium	13.1	1	1	mg/Kg		12/27/19 SBW	
Cobalt	7.42	1	0.5	mg/Kg		12/27/19 SBW	
Copper	13.6	1	1	mg/Kg		12/30/19 SBW	
Lead	5.79	1	1	mg/Kg		12/30/19 SBW	
Molybdenum	ND	1	1	mg/Kg		12/27/19 SBW	J
Nickel	11.5	1	1.5	mg/Kg		12/30/19 SBW	
Selenium	ND	1	3	mg/Kg		12/27/19 SBW	
Silver	ND	1	0.5	mg/Kg		12/27/19 SBW	
Thallium	ND	1	3	mg/Kg		12/27/19 SBW	J
Vanadium	25.1	1	0.5	mg/Kg		12/27/19 SBW	
Zinc	45.2	1	5	mg/Kg		12/27/19 SBW	

Method: EPA 7471A <i>NELAC</i>		Prep Method: EPA 7471A		QCBatchID: QC1213022			
Mercury	ND	1	0.14	mg/Kg	12/29/19	12/30/19 SBW	

Method: EPA 8081A <i>NELAC</i>		Prep Method: EPA 3545		QCBatchID: QC1213156			
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
4,4'-DDE	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	J
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	J
a-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Aldrin	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
b-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
d-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endrin	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/03/20 MTS	
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/03/20 MTS	
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/03/20 MTS	

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	62	24.4-119.9	
Tetrachloro-m-xylene TCMX (SUR)	73	50-150	

Method: EPA 8082 <i>NELAC</i>		Prep Method: EPA 3545		QCBatchID: QC1213157			
PCB-1016	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1221	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1232	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1242	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1248	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1254	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1260	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1262	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	
PCB-1268	ND	1	50	ug/Kg	01/02/20	01/03/20 MTS	

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: <u>423106-010</u>	Client Sample #: 4-pt comp 01-SP-B1, B2, C1, C2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
<u>Surrogate</u>							
<i>Decachlorobiphenyl DCB (SUR)</i>							
	<u>% Recovery</u>		<u>Limits</u>				<u>Notes</u>
	87		50-150				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:15	Site:	
Sample #: 423106-011	Client Sample #: 01-SP-B4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	80		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	110		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:15	Site:	
Sample #: <u>423106-011</u>	Client Sample #: 01-SP-B4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	121	66.7-166.6	
4-Bromofluorobenzene (SUR)	101	70-145	
Dibromofluoromethane (SUR)	110	70-145	
Toluene-d8 (SUR)	87	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Chrysene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Dibenz(a,h)anthracene	10	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	85	30-120	
Nitrobenzene-d5 (SUR)	116	27-125	
p-Terphenyl (SUR)	91	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:20	Site:	
Sample #: 423106-012	Client Sample #: 01-SP-B5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	103		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:20	Site:	
Sample #: 423106-012	Client Sample #: 01-SP-B5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	119	66.7-166.6	
4-Bromofluorobenzene (SUR)	101	70-145	
Dibromofluoromethane (SUR)	106	70-145	
Toluene-d8 (SUR)	87	70-145	

Method:	EPA 8270CM	Prep Method:	EPA 3545	QC Batch ID:	QC1213147			
1-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	
2-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J
Acenaphthylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Anthracene	59	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Benz(a)anthracene	370	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(a)pyrene	290	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(b)fluoranthene	290	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(g,h,i)perylene	85	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(k)fluoranthene	250	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Chrysene	320	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Dibenz(a,h)anthracene	69	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Fluoranthene	710	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Fluorene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J
Indeno(1,2,3-cd)pyrene	120	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Naphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Phenanthrene	250	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Pyrene	570	5	50	ug/Kg	01/02/20	01/06/20	CBR	
Surrogate		% Recovery		Limits		Notes		
2-Fluorobiphenyl (SUR)		96		30-120				
Nitrobenzene-d5 (SUR)		127		27-125		S		
p-Terphenyl (SUR)		131		33-155				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:30	Site:	
Sample #: 423106-013	Client Sample #: 01-SP-C4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	100		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		12/31/19	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		12/31/19	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	106		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:30	Site:	
Sample #: <u>423106-013</u>	Client Sample #: 01-SP-C4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	124	66.7-166.6	
4-Bromofluorobenzene (SUR)	100	70-145	
Dibromofluoromethane (SUR)	109	70-145	
Toluene-d8 (SUR)	87	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Chrysene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Dibenz(a,h)anthracene	10	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Surrogate	% Recovery	Limits	Notes					
2-Fluorobiphenyl (SUR)	105	30-120						
Nitrobenzene-d5 (SUR)	133	27-125	S					
p-Terphenyl (SUR)	99	33-155						

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:35	Site:	
Sample #: 423106-014	Client Sample #: 01-SP-C5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/01/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/01/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	106		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:35	Site:	
Sample #: 423106-014	Client Sample #: 01-SP-C5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ	
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ	
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ	
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ	
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ	
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ	
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ	
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ	
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ	
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ	
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ	
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ	
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	124	66.7-166.6	
4-Bromofluorobenzene (SUR)	101	70-145	
Dibromofluoromethane (SUR)	112	70-145	
Toluene-d8 (SUR)	85	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Chrysene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Dibenz(a,h)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Surrogate	% Recovery	Limits	Notes					
2-Fluorobiphenyl (SUR)	48	30-120						
Nitrobenzene-d5 (SUR)	64	27-125						
p-Terphenyl (SUR)	56	33-155						

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: 423106-015	Client Sample #: 4-pt comp 01-SP-B4, B5, C4, C5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B NELAC		Prep Method: EPA 3050B		QCBatchID: QC1212910			
Antimony	ND	1	3	mg/Kg	12/30/19	SBW	B
Arsenic	ND	1	1	mg/Kg	12/27/19	SBW	
Barium	35.8	1	1	mg/Kg	12/27/19	SBW	
Beryllium	ND	1	0.5	mg/Kg	12/27/19	SBW	
Cadmium	0.68	1	0.5	mg/Kg	12/27/19	SBW	
Chromium	7.60	1	1	mg/Kg	12/27/19	SBW	
Cobalt	5.95	1	0.5	mg/Kg	12/27/19	SBW	
Copper	7.94	1	1	mg/Kg	12/30/19	SBW	
Lead	4.92	1	1	mg/Kg	12/30/19	SBW	
Molybdenum	ND	1	1	mg/Kg	12/27/19	SBW	
Nickel	6.09	1	1.5	mg/Kg	12/30/19	SBW	
Selenium	ND	1	3	mg/Kg	12/27/19	SBW	J
Silver	ND	1	0.5	mg/Kg	12/27/19	SBW	
Thallium	ND	1	3	mg/Kg	12/27/19	SBW	
Vanadium	15.2	1	0.5	mg/Kg	12/27/19	SBW	
Zinc	37.9	1	5	mg/Kg	12/27/19	SBW	

Method: EPA 7471A NELAC		Prep Method: EPA 7471A		QCBatchID: QC1213022			
Mercury	ND	1	0.14	mg/Kg	12/29/19	12/30/19	SBW

Method: EPA 8081A NELAC		Prep Method: EPA 3545		QCBatchID: QC1213156			
4,4'-DDD	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
4,4'-DDE	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS J,D2
4,4'-DDT	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
a-BHC	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Aldrin	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
b-BHC	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Chlordane (technical)	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
d-BHC	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Dieldrin	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Endosulfan I	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Endosulfan II	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Endosulfan sulfate	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Endrin	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Endrin aldehyde	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Endrin Ketone	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Heptachlor	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Heptachlor epoxide	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Lindane (Gamma-BHC)	ND	2	10	ug/Kg	01/02/20	01/03/20	MTS D2
Methoxychlor	ND	2	20	ug/Kg	01/02/20	01/03/20	MTS D2
Toxaphene	ND	2	200	ug/Kg	01/02/20	01/03/20	MTS D2

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	55	24.4-119.9	
Tetrachloro-m-xylene TCMX (SUR)	67	50-150	

Method: EPA 8082 NELAC		Prep Method: EPA 3545		QCBatchID: QC1213157			
PCB-1016	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1221	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1232	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1242	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1248	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1254	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1260	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1262	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2
PCB-1268	ND	2	100	ug/Kg	01/02/20	01/03/20	MTS D2

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: <u>423106-015</u>	Client Sample #: 4-pt comp 01-SP-B4, B5, C4, C5	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
<u>Surrogate</u>		<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>			
Decachlorobiphenyl DCB (SUR)		82	50-150				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:45	Site:	
Sample #: 423106-016	Client Sample #: 01-SP-C3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/01/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/01/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	106		50-150				
Method: EPA 8260B NELAC	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:45	Site:	
Sample #: 423106-016	Client Sample #: 01-SP-C3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	96	66.7-166.6	
4-Bromofluorobenzene (SUR)	96	70-145	
Dibromofluoromethane (SUR)	101	70-145	
Toluene-d8 (SUR)	98	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147					
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Acenaphthene	22	1	10	ug/Kg	01/02/20	01/06/20	CBR
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Anthracene	40	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benz(a)anthracene	110	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(a)pyrene	89	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(b)fluoranthene	62	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(g,h,i)perylene	37	1	10	ug/Kg	01/02/20	01/06/20	CBR
Benzo(k)fluoranthene	74	1	10	ug/Kg	01/02/20	01/06/20	CBR
Chrysene	110	1	10	ug/Kg	01/02/20	01/06/20	CBR
Dibenz(a,h)anthracene	17	1	10	ug/Kg	01/02/20	01/06/20	CBR
Fluoranthene	250	1	10	ug/Kg	01/02/20	01/06/20	CBR
Fluorene	14	1	10	ug/Kg	01/02/20	01/06/20	CBR
Indeno(1,2,3-cd)pyrene	50	1	10	ug/Kg	01/02/20	01/06/20	CBR
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR
Phenanthrene	180	1	10	ug/Kg	01/02/20	01/06/20	CBR
Pyrene	240	1	10	ug/Kg	01/02/20	01/06/20	CBR
Surrogate	% Recovery	Limits	Notes				
2-Fluorobiphenyl (SUR)	85	30-120					
Nitrobenzene-d5 (SUR)	110	27-125					
p-Terphenyl (SUR)	96	33-155					

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:50	Site:	
Sample #: <u>423106-017</u>	Client Sample #: 01-SP-D2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/01/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/01/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	110		50-150				

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1212895				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/24/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/24/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/24/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/24/19	ZZ
Acetone	ND	1	100	ug/Kg		12/24/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Benzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/24/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/24/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/24/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:50	Site:	
Sample #: <u>423106-017</u>	Client Sample #: 01-SP-D2	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/24/19	ZZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Ethylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Hexachlorobutadiene	ND	1	5	ug/Kg		12/24/19	ZZ
Isopropylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
m and p-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Methylene chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/24/19	ZZ
Naphthalene	ND	1	5	ug/Kg		12/24/19	ZZ
N-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
N-propylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
o-Xylene	ND	1	5	ug/Kg		12/24/19	ZZ
Sec-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Styrene	ND	1	5	ug/Kg		12/24/19	ZZ
Tert-butylbenzene	ND	1	5	ug/Kg		12/24/19	ZZ
Tetrachloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Toluene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/24/19	ZZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichloroethene	ND	1	5	ug/Kg		12/24/19	ZZ
Trichlorofluoromethane	ND	1	5	ug/Kg		12/24/19	ZZ
Vinyl Chloride	ND	1	5	ug/Kg		12/24/19	ZZ
Xylenes (Total)	ND	1	5	ug/Kg		12/24/19	ZZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	121	66.7-166.6	
4-Bromofluorobenzene (SUR)	99	70-145	
Dibromofluoromethane (SUR)	107	70-145	
Toluene-d8 (SUR)	89	70-145	

Method:	EPA 8270CM	Prep Method:	EPA 3545	QC Batch ID:	QC1213147			
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Anthracene	17	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benz(a)anthracene	64	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(a)pyrene	55	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(b)fluoranthene	37	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(g,h,i)perylene	22	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benzo(k)fluoranthene	45	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Chrysene	64	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Dibenz(a,h)anthracene	14	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Fluoranthene	120	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Indeno(1,2,3-cd)pyrene	29	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Phenanthrene	55	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Pyrene	120	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Surrogate		% Recovery		Limits		Notes		
2-Fluorobiphenyl (SUR)		76		30-120				
Nitrobenzene-d5 (SUR)		101		27-125				
p-Terphenyl (SUR)		81		33-155				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 10:55	Site:	
Sample #: 423106-018	Client Sample #: 01-SP-D3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/01/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/01/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	108		50-150				

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8260B NELAC	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 10:55	Site:	
Sample #: 423106-018	Client Sample #: 01-SP-D3	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ	
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ	
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	99	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	102	70-145	
Toluene-d8 (SUR)	96	70-145	

Method:	EPA 8270CM	Prep Method:	EPA 3545	QCBatchID:	QC1213147			
1-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
2-Methylnaphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Acenaphthylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Benz(a)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(a)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(b)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Benzo(k)fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Chrysene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Dibenz(a,h)anthracene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Fluoranthene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Fluorene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Naphthalene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	
Phenanthrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Pyrene	ND	1	10	ug/Kg	01/02/20	01/06/20	CBR	J
Surrogate		% Recovery		Limits			Notes	
2-Fluorobiphenyl (SUR)		93		30-120				
Nitrobenzene-d5 (SUR)		127		27-125			S	
p-Terphenyl (SUR)		101		33-155				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019 11:05	Site:	
Sample #: 423106-019	Client Sample #: 01-SP-D4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 5030		QCBatchID: QC1209388				
TPH (C6 to C12)	ND	1	3	mg/Kg		12/28/19	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1212963				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/01/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/01/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	108		50-150				
Method: EPA 8260B NELAC	Prep Method: EPA 5030		QCBatchID: QC1213012				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
1,1-Dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dibromoethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
1,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
1,3-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
2,2-Dichloropropane	ND	1	5	ug/Kg		12/28/19	ZZ
2-Butanone (MEK)	ND	1	100	ug/Kg		12/28/19	ZZ
2-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Chlorotoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Isopropyltoluene	ND	1	5	ug/Kg		12/28/19	ZZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		12/28/19	ZZ
Acetone	ND	1	100	ug/Kg		12/28/19	ZZ
Allyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ
Benzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Bromochloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromodichloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
Bromoform	ND	1	5	ug/Kg		12/28/19	ZZ
Bromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Carbon Tetrachloride	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorobenzene	ND	1	5	ug/Kg		12/28/19	ZZ
Chlorodibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroethane	ND	1	5	ug/Kg		12/28/19	ZZ
Chloroform	ND	1	5	ug/Kg		12/28/19	ZZ
Chloromethane	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019 11:05	Site:	
Sample #: 423106-019	Client Sample #: 01-SP-D4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Dichlorodifluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Ethylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Hexachlorobutadiene	ND	1	5	ug/Kg		12/28/19	ZZ	
Isopropylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
m and p-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Methylene chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		12/28/19	ZZ	
Naphthalene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
N-propylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
o-Xylene	ND	1	5	ug/Kg		12/28/19	ZZ	
Sec-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Styrene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tert-butylbenzene	ND	1	5	ug/Kg		12/28/19	ZZ	
Tetrachloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Toluene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,2-dichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,3-dichloropropene	ND	1	5	ug/Kg		12/28/19	ZZ	
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichloroethene	ND	1	5	ug/Kg		12/28/19	ZZ	
Trichlorofluoromethane	ND	1	5	ug/Kg		12/28/19	ZZ	
Vinyl Chloride	ND	1	5	ug/Kg		12/28/19	ZZ	
Xylenes (Total)	ND	1	5	ug/Kg		12/28/19	ZZ	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	96	66.7-166.6	
4-Bromofluorobenzene (SUR)	99	70-145	
Dibromofluoromethane (SUR)	103	70-145	
Toluene-d8 (SUR)	98	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213147						
1-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
2-Methylnaphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Acenaphthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Acenaphthylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benz(a)anthracene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Benzo(a)pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(b)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Benzo(g,h,i)perylene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Benzo(k)fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Chrysene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Dibenz(a,h)anthracene	50	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Fluoranthene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Fluorene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Naphthalene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Phenanthrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	D2
Pyrene	ND	5	50	ug/Kg	01/02/20	01/06/20	CBR	J,D2
Surrogate	% Recovery	Limits	Notes					
2-Fluorobiphenyl (SUR)	75	30-120						
Nitrobenzene-d5 (SUR)	98	27-125						
p-Terphenyl (SUR)	110	33-155						

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: 423106-020	Client Sample #: 4-pt comp 01-SP-C3, D2, D3, D4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B NELAC		Prep Method: EPA 3050B		QCBatchID: QC1212910			
Antimony	ND	1	3	mg/Kg	12/30/19	SBW	B
Arsenic	ND	1	1	mg/Kg	12/27/19	SBW	J
Barium	49.2	1	1	mg/Kg	12/27/19	SBW	
Beryllium	ND	1	0.5	mg/Kg	12/27/19	SBW	
Cadmium	0.63	1	0.5	mg/Kg	12/27/19	SBW	
Chromium	23.4	1	1	mg/Kg	12/27/19	SBW	
Cobalt	8.14	1	0.5	mg/Kg	12/27/19	SBW	
Copper	47.7	1	1	mg/Kg	12/30/19	SBW	
Lead	9.64	1	1	mg/Kg	12/30/19	SBW	
Molybdenum	ND	1	1	mg/Kg	12/27/19	SBW	
Nickel	12.0	1	1.5	mg/Kg	12/30/19	SBW	
Selenium	ND	1	3	mg/Kg	12/27/19	SBW	
Silver	ND	1	0.5	mg/Kg	12/27/19	SBW	
Thallium	ND	1	3	mg/Kg	12/27/19	SBW	
Vanadium	28.4	1	0.5	mg/Kg	12/27/19	SBW	
Zinc	51.4	1	5	mg/Kg	12/27/19	SBW	

Method: EPA 7471A NELAC		Prep Method: EPA 7471A		QCBatchID: QC1213022			
Mercury	ND	1	0.14	mg/Kg	12/29/19	12/30/19	SBW

Method: EPA 8081A NELAC		Prep Method: EPA 3545		QCBatchID: QC1213156			
4,4'-DDD	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS J
4,4'-DDE	9.1	1	5	ug/Kg	01/02/20	01/03/20	MTS
4,4'-DDT	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS J
a-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Aldrin	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
b-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Chlordane (technical)	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
d-BHC	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Dieldrin	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Endosulfan I	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Endosulfan II	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Endosulfan sulfate	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Endrin	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Endrin aldehyde	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Endrin Ketone	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Heptachlor	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Heptachlor epoxide	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Lindane (Gamma-BHC)	ND	1	5	ug/Kg	01/02/20	01/03/20	MTS
Methoxychlor	ND	1	10	ug/Kg	01/02/20	01/03/20	MTS
Toxaphene	ND	1	100	ug/Kg	01/02/20	01/03/20	MTS

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	37	24.4-119.9	
Tetrachloro-m-xylene TCMX (SUR)	45	50-150	S

Method: EPA 8082 NELAC		Prep Method: EPA 3545		QCBatchID: QC1213157			
PCB-1016	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1221	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1232	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1242	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1248	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1254	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1260	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1262	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS
PCB-1268	ND	1	50	ug/Kg	01/02/20	01/03/20	MTS

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 12/23/2019	Site:	
Sample #: <u>423106-020</u>	Client Sample #: 4-pt comp 01-SP-C3, D2, D3, D4	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
<u>Surrogate</u>							
<i>Decachlorobiphenyl DCB (SUR)</i>		<i>% Recovery</i>	<i>Limits</i>	<i>Notes</i>			
		54	50-150				

QCBatchID: QC1209388	Analyst: sandyw	Method: EPA 8015B
Matrix: Solid	Analyzed: 12/27/2019	Instrument: VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1209388MB1				
TPH (C6 to C12)	ND	mg/Kg	3	
TPH Gasoline	ND	mg/Kg	3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1209388LCS1											
TPH (C6 to C12)	5		5.6		mg/Kg	112			70-130		
TPH Gasoline	5		5.6		mg/Kg	112			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1209388MS1, QC1209388MSD1 Source: 423106-001												
TPH (C6 to C12)	ND	5	5	4.9	5.0	mg/Kg	98	100	2.0	70-130	20	

QCBatchID: **QC1212895**

Analyst: nicollez

Method: EPA 8260B

Matrix: Solid

Analyzed: 12/24/2019

Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1212895MB1				
1,1,1,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,1-Trichloroethane	ND	ug/Kg	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,2-Trichloroethane	ND	ug/Kg	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	5	
1,1-Dichloroethane	ND	ug/Kg	5	
1,1-Dichloroethene	ND	ug/Kg	5	
1,1-Dichloropropene	ND	ug/Kg	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	5	
1,2,3-Trichloropropane	ND	ug/Kg	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	5	
1,2-Dibromoethane	ND	ug/Kg	5	
1,2-Dichlorobenzene	ND	ug/Kg	5	
1,2-Dichloroethane	ND	ug/Kg	5	
1,2-Dichloropropane	ND	ug/Kg	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	5	
1,3-Dichlorobenzene	ND	ug/Kg	5	
1,3-Dichloropropane	ND	ug/Kg	5	
1,4-Dichlorobenzene	ND	ug/Kg	5	
2,2-Dichloropropane	ND	ug/Kg	5	
2-Butanone (MEK)	ND	ug/Kg	100	
2-Chlorotoluene	ND	ug/Kg	5	
4-Chlorotoluene	ND	ug/Kg	5	
4-Isopropyltoluene	ND	ug/Kg	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	5	
Acetone	ND	ug/Kg	100	
Allyl Chloride	ND	ug/Kg	5	
Benzene	ND	ug/Kg	5	
Bromobenzene	ND	ug/Kg	5	
Bromochloromethane	ND	ug/Kg	5	
Bromodichloromethane	ND	ug/Kg	5	
Bromoform	ND	ug/Kg	5	
Bromomethane	ND	ug/Kg	5	
Carbon Tetrachloride	ND	ug/Kg	5	
Chlorobenzene	ND	ug/Kg	5	
Chlorodibromomethane	ND	ug/Kg	5	
Chloroethane	ND	ug/Kg	5	
Chloroform	ND	ug/Kg	5	
Chloromethane	ND	ug/Kg	5	
cis-1,2-Dichloroethene	ND	ug/Kg	5	
cis-1,3-dichloropropene	ND	ug/Kg	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	5	
Dibromomethane	ND	ug/Kg	5	
Dichlorodifluoromethane	ND	ug/Kg	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	5	
Ethylbenzene	ND	ug/Kg	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	5	
Hexachlorobutadiene	ND	ug/Kg	5	
Isopropylbenzene	ND	ug/Kg	5	
m and p-Xylene	ND	ug/Kg	5	

QCBatchID: **QC1212895**

Analyst: nicollez

Method: EPA 8260B

Matrix: Solid

Analyzed: 12/24/2019

Instrument: VOA-MS (group)

Analyte	Blank Result	Units	RDL	Notes
QC1212895MB1				
Methylene chloride	ND	ug/Kg	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	5	
Naphthalene	ND	ug/Kg	5	
N-butylbenzene	ND	ug/Kg	5	
N-propylbenzene	ND	ug/Kg	5	
o-Xylene	ND	ug/Kg	5	
Sec-butylbenzene	ND	ug/Kg	5	
Styrene	ND	ug/Kg	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	5	
Tert-butylbenzene	ND	ug/Kg	5	
Tetrachloroethene	ND	ug/Kg	5	
Toluene	ND	ug/Kg	5	
trans-1,2-dichloroethene	ND	ug/Kg	5	
trans-1,3-dichloropropene	ND	ug/Kg	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	5	
Trichloroethene	ND	ug/Kg	5	
Trichlorofluoromethane	ND	ug/Kg	5	
Vinyl Chloride	ND	ug/Kg	5	
Xylenes (Total)	ND	ug/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1212895LCS1, QC1212895LCSD1											
1,1-Dichloroethene	50	50	73	74	ug/Kg	146	148	1	59-172	22	
Benzene	50	50	64	63	ug/Kg	128	126	2	62-137	24	
Chlorobenzene	50	50	49	47	ug/Kg	98	94	4	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	54	52	ug/Kg	108	104	4	62-137	21	
Toluene	50	50	53	51	ug/Kg	106	102	4	59-139	21	
Trichloroethene	50	50	48	46	ug/Kg	96	92	4	66-142	21	

QCBatchID: QC1212910	Analyst: rvenegas	Method: EPA 6010B
Matrix: Solid	Analyzed: 12/24/2019	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1212910MB1				
Antimony	3.30	mg/Kg	3	B
Arsenic	ND	mg/Kg	1	
Barium	ND	mg/Kg	1	
Beryllium	ND	mg/Kg	0.5	
Cadmium	ND	mg/Kg	0.5	
Chromium	ND	mg/Kg	1	
Cobalt	ND	mg/Kg	0.5	
Copper	ND	mg/Kg	1	
Lead	ND	mg/Kg	1	
Molybdenum	ND	mg/Kg	1	
Nickel	ND	mg/Kg	1.5	
Selenium	ND	mg/Kg	3	
Silver	ND	mg/Kg	0.5	
Thallium	ND	mg/Kg	3	
Vanadium	ND	mg/Kg	0.5	
Zinc	ND	mg/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes	
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD		
QC1212910LCS1												
Antimony	100		96.1		mg/Kg	96			80-120			
Arsenic	100		93.8		mg/Kg	94			80-120			
Barium	100		95.8		mg/Kg	96			80-120			
Beryllium	100		91.0		mg/Kg	91			80-120			
Cadmium	100		98.9		mg/Kg	99			80-120			
Chromium	100		93.0		mg/Kg	93			80-120			
Cobalt	100		99.2		mg/Kg	99			80-120			
Copper	100		102		mg/Kg	102			80-120			
Lead	100		100		mg/Kg	100			80-120			
Molybdenum	100		95.4		mg/Kg	95			80-120			
Nickel	100		99.4		mg/Kg	99			80-120			
Selenium	100		86.8		mg/Kg	87			80-120			
Silver	100		89.0		mg/Kg	89			80-120			
Thallium	100		95.5		mg/Kg	96			80-120			
Vanadium	100		94.7		mg/Kg	95			80-120			
Zinc	100		97.1		mg/Kg	97			80-120			

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1212910MS1, QC1212910MSD1												
Source: 423106-005												
Antimony	ND	100	100	32.1	53.6	mg/Kg	32	54	50.2	75-125	20	M
Arsenic	4.13	100	100	99.3	102	mg/Kg	95	98	2.7	75-125	20	
Barium	54.1	100	100	162	160	mg/Kg	108	106	1.2	75-125	20	
Beryllium	ND	100	100	77.1	98.5	mg/Kg	77	99	24.4	75-125	20	M
Cadmium	0.49	100	100	90.9	100	mg/Kg	90	100	9.5	75-125	20	
Chromium	14.4	100	100	101	111	mg/Kg	87	97	9.4	75-125	20	
Cobalt	7.39	100	100	99.6	109	mg/Kg	92	102	9.0	75-125	20	
Copper	12.8	100	100	95.6	112	mg/Kg	83	99	15.8	75-125	20	
Lead	13.2	100	100	118	177	mg/Kg	105	164	40.0	75-125	20	M
Molybdenum	1.11	100	100	89.8	96.8	mg/Kg	89	96	7.5	75-125	20	

QCBatchID: QC1212910**Analyst: rvenegas****Method: EPA 6010B****Matrix: Solid****Analyzed: 12/24/2019****Instrument: AAICP (group)**

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1212910MS1, QC1212910MSD1											Source: 423106-005	
Nickel	9.47	100	100	104	107	mg/Kg	95	98	2.8	75-125	20	
Selenium	ND	100	100	87.1	89.8	mg/Kg	87	90	3.1	75-125	20	
Silver	ND	100	100	86.0	95.3	mg/Kg	86	95	10.3	75-125	20	
Thallium	1.37	100	100	86.6	96.6	mg/Kg	85	95	10.9	75-125	20	
Vanadium	23.5	100	100	118	123	mg/Kg	95	100	4.1	75-125	20	
Zinc	50.4	100	100	141	139	mg/Kg	91	89	1.4	75-125	20	

QCBatchID: QC1212963	Analyst: TWu	Method: EPA 8015M
Matrix: Solid	Analyzed: 12/27/2019	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1212963MB1				
TPH (C10 to C28) (SGT)	ND	mg/Kg	10	
TPH (C13 to C22) (SGT)	ND	mg/Kg	10	
TPH (C13 to C28) (SGT)	ND	mg/Kg	10	
TPH (C29 to C 40) (SGT)	ND	mg/Kg	20	
TPH Diesel (SGT)	ND	mg/Kg	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1212963LCS1											
TPH (C10 to C28) (SGT)	250		191		mg/Kg	76			36-138		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1212963MS1, QC1212963MSD1												
TPH (C10 to C28) (SGT)	ND	250	250	210	224	mg/Kg	84	90	6.5	70-130	30	Source: 423106-002

QCBatchID: **QC1213012**

Analyst: lucy

Method: EPA 8260B

Matrix: Solid

Analyzed: 12/28/2019

Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213012MB1				
1,1,1,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,1-Trichloroethane	ND	ug/Kg	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,2-Trichloroethane	ND	ug/Kg	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	5	
1,1-Dichloroethane	ND	ug/Kg	5	
1,1-Dichloroethene	ND	ug/Kg	5	
1,1-Dichloropropene	ND	ug/Kg	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	5	
1,2,3-Trichloropropane	ND	ug/Kg	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	5	
1,2-Dibromoethane	ND	ug/Kg	5	
1,2-Dichlorobenzene	ND	ug/Kg	5	
1,2-Dichloroethane	ND	ug/Kg	5	
1,2-Dichloropropane	ND	ug/Kg	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	5	
1,3-Dichlorobenzene	ND	ug/Kg	5	
1,3-Dichloropropane	ND	ug/Kg	5	
1,4-Dichlorobenzene	ND	ug/Kg	5	
2,2-Dichloropropane	ND	ug/Kg	5	
2-Butanone (MEK)	ND	ug/Kg	100	
2-Chlorotoluene	ND	ug/Kg	5	
4-Chlorotoluene	ND	ug/Kg	5	
4-Isopropyltoluene	ND	ug/Kg	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	5	
Acetone	ND	ug/Kg	100	
Allyl Chloride	ND	ug/Kg	5	
Benzene	ND	ug/Kg	5	
Bromobenzene	ND	ug/Kg	5	
Bromochloromethane	ND	ug/Kg	5	
Bromodichloromethane	ND	ug/Kg	5	
Bromoform	ND	ug/Kg	5	
Bromomethane	ND	ug/Kg	5	
Carbon Tetrachloride	ND	ug/Kg	5	
Chlorobenzene	ND	ug/Kg	5	
Chlorodibromomethane	ND	ug/Kg	5	
Chloroethane	ND	ug/Kg	5	
Chloroform	ND	ug/Kg	5	
Chloromethane	ND	ug/Kg	5	
cis-1,2-Dichloroethene	ND	ug/Kg	5	
cis-1,3-dichloropropene	ND	ug/Kg	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	5	
Dibromomethane	ND	ug/Kg	5	
Dichlorodifluoromethane	ND	ug/Kg	5	
Ethylbenzene	ND	ug/Kg	5	
Hexachlorobutadiene	ND	ug/Kg	5	
Isopropylbenzene	ND	ug/Kg	5	
m and p-Xylene	ND	ug/Kg	5	
Methylene chloride	ND	ug/Kg	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	5	

QCBatchID: QC1213012	Analyst: lucy	Method: EPA 8260B
Matrix: Solid	Analyzed: 12/28/2019	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	RDL	Notes
QC1213012MB1				
Naphthalene	ND	ug/Kg	5	
N-butylbenzene	ND	ug/Kg	5	
N-propylbenzene	ND	ug/Kg	5	
o-Xylene	ND	ug/Kg	5	
Sec-butylbenzene	ND	ug/Kg	5	
Styrene	ND	ug/Kg	5	
Tert-butylbenzene	ND	ug/Kg	5	
Tetrachloroethene	ND	ug/Kg	5	
Toluene	ND	ug/Kg	5	
trans-1,2-dichloroethene	ND	ug/Kg	5	
trans-1,3-dichloropropene	ND	ug/Kg	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	5	
Trichloroethene	ND	ug/Kg	5	
Trichlorofluoromethane	ND	ug/Kg	5	
Vinyl Chloride	ND	ug/Kg	5	
Xylenes (Total)	ND	ug/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213012LCS1											
1,1-Dichloroethene	50		52		ug/Kg	104			59-172		
Benzene	50		50		ug/Kg	100			62-137		
Chlorobenzene	50		48		ug/Kg	96			60-133		
Methyl-t-butyl Ether (MTBE)	50		45		ug/Kg	90			62-137		
Toluene	50		48		ug/Kg	96			59-139		
Trichloroethene	50		46		ug/Kg	92			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213012MS1, QC1213012MSD1												
Source: 423106-002												
1,1-Dichloroethene	ND	50	50	48	51	ug/Kg	96	102	6.1	59-172	22	
Benzene	ND	50	50	46	49	ug/Kg	92	98	6.3	62-137	24	
Chlorobenzene	ND	50	50	43	47	ug/Kg	86	94	8.9	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	45	47	ug/Kg	90	94	4.3	62-137	21	
Toluene	ND	50	50	44	47	ug/Kg	88	94	6.6	59-139	21	
Trichloroethene	ND	50	50	43	47	ug/Kg	86	94	8.9	66-142	21	

QCBatchID: QC1213022	Analyst: dswafford	Method: EPA 7471A
Matrix: Solid	Analyzed: 12/29/2019	Instrument: AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213022MB1				
Mercury	ND	mg/Kg	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213022LCS1											
Mercury	0.83		0.86		mg/Kg	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213022MS1, QC1213022MSD1												
Mercury	0.05	0.83	0.83	0.79	0.84	mg/Kg	89	95	6.1	75-125	20	

QCBatchID: QC1213147	Analyst: bmorris	Method: EPA 8270CM
Matrix: Solid	Analyzed: 01/02/2020	Instrument: SVOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213147MB1				
1-Methylnaphthalene	ND	ug/Kg	10	
2-Methylnaphthalene	ND	ug/Kg	10	
Acenaphthene	ND	ug/Kg	10	
Acenaphthylene	ND	ug/Kg	10	
Anthracene	ND	ug/Kg	10	
Benz(a)anthracene	ND	ug/Kg	10	
Benzo(a)pyrene	ND	ug/Kg	10	
Benzo(b)fluoranthene	ND	ug/Kg	10	
Benzo(g,h,i)perylene	ND	ug/Kg	10	
Benzo(k)fluoranthene	ND	ug/Kg	10	
Chrysene	ND	ug/Kg	10	
Dibenz(a,h)anthracene	ND	ug/Kg	10	
Fluoranthene	ND	ug/Kg	10	
Fluorene	ND	ug/Kg	10	
Indeno(1,2,3-cd)pyrene	ND	ug/Kg	10	
Naphthalene	ND	ug/Kg	10	
Phenanthrene	ND	ug/Kg	10	
Pyrene	ND	ug/Kg	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213147LCS1											
1-Methylnaphthalene	50		40		ug/Kg	80			28-130		
2-Methylnaphthalene	50		43		ug/Kg	86			33-130		
Acenaphthene	50		43		ug/Kg	86			32-130		
Acenaphthylene	50		46		ug/Kg	92			28-130		
Anthracene	50		34		ug/Kg	68			34-130		
Benz(a)anthracene	50		40		ug/Kg	80			30-132		
Benzo(a)pyrene	50		26		ug/Kg	52			10-138		
Benzo(b)fluoranthene	50		40		ug/Kg	80			32-137		
Benzo(g,h,i)perylene	50		34		ug/Kg	68			27-130		
Benzo(k)fluoranthene	50		37		ug/Kg	74			32-130		
Chrysene	50		38		ug/Kg	76			29-130		
Dibenz(a,h)anthracene	50		36		ug/Kg	72			32-130		
Fluoranthene	50		47		ug/Kg	94			34-130		
Fluorene	50		44		ug/Kg	88			35-130		
Indeno(1,2,3-cd)pyrene	50		37		ug/Kg	74			34-132		
Naphthalene	50		43		ug/Kg	86			25-130		
Phenanthrene	50		38		ug/Kg	76			35-130		
Pyrene	50		45		ug/Kg	90			35-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213147MS1, QC1213147MSD1												
1-Methylnaphthalene	ND	50	50	43	41	ug/Kg	86	82	4.8	25-130	35	
2-Methylnaphthalene	ND	50	50	46	43	ug/Kg	92	86	6.7	32-133	35	
Acenaphthene	ND	50	50	45	41	ug/Kg	90	82	9.3	28-134	35	
Acenaphthylene	ND	50	50	51	49	ug/Kg	102	98	4.0	14-157	35	
Anthracene	ND	50	50	49	46	ug/Kg	98	92	6.3	24-156	35	
Benz(a)anthracene	ND	50	50	53	52	ug/Kg	106	104	1.9	26-174	35	

Source: 423096-002

QCBatchID: **QC1213147**

Analyst: bmorris

Method: EPA 8270CM

Matrix: Solid

Analyzed: 01/02/2020

Instrument: SVOA-MS (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213147MS1, QC1213147MSD1											Source: 423096-002	
Benzo(a)pyrene	ND	50	50	41	40	ug/Kg	82	80	2.5	18-173	35	
Benzo(b)fluoranthene	ND	50	50	47	45	ug/Kg	94	90	4.3	36-164	35	
Benzo(g,h,i)perylene	ND	50	50	37	34	ug/Kg	74	68	8.5	36-130	35	
Benzo(k)fluoranthene	ND	50	50	43	43	ug/Kg	86	86	0.0	36-161	35	
Chrysene	ND	50	50	45	43	ug/Kg	90	86	4.5	40-139	35	
Dibenz(a,h)anthracene	ND	50	50	36	35	ug/Kg	72	70	2.8	38-132	35	
Fluoranthene	ND	50	50	55	53	ug/Kg	110	106	3.7	28-160	35	
Fluorene	ND	50	50	47	43	ug/Kg	94	86	8.9	27-140	35	
Indeno(1,2,3-cd)pyrene	ND	50	50	38	36	ug/Kg	76	72	5.4	26-154	35	
Naphthalene	ND	50	50	46	41	ug/Kg	92	82	11.5	33-130	35	
Phenanthrene	ND	50	50	49	46	ug/Kg	98	92	6.3	29-147	35	
Pyrene	ND	50	50	51	49	ug/Kg	102	98	4.0	26-153	35	

QCBatchID: QC1213156	Analyst: bmorris	Method: EPA 8081A
Matrix: Solid	Analyzed: 01/02/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213156MB1				
4,4'-DDD	ND	ug/Kg	5	
4,4'-DDE	ND	ug/Kg	5	
4,4'-DDT	ND	ug/Kg	5	
a-BHC	ND	ug/Kg	5	
Aldrin	ND	ug/Kg	5	
b-BHC	ND	ug/Kg	5	
Chlordane (technical)	ND	ug/Kg	50	
d-BHC	ND	ug/Kg	5	
Dieldrin	ND	ug/Kg	5	
Endosulfan I	ND	ug/Kg	5	
Endosulfan II	ND	ug/Kg	5	
Endosulfan sulfate	ND	ug/Kg	5	
Endrin	ND	ug/Kg	5	
Endrin aldehyde	ND	ug/Kg	5	
Endrin Ketone	ND	ug/Kg	5	
Heptachlor	ND	ug/Kg	5	
Heptachlor epoxide	ND	ug/Kg	5	
Lindane (Gamma-BHC)	ND	ug/Kg	5	
Methoxychlor	ND	ug/Kg	10	
Toxaphene	ND	ug/Kg	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213156LCS1											
4,4'-DDD	50		29		ug/Kg	58			43-172		
4,4'-DDE	50		31		ug/Kg	62			44-163		
4,4'-DDT	50		32		ug/Kg	64			40-158		
a-BHC	50		32		ug/Kg	64			45-150		
Aldrin	50		28		ug/Kg	56			46-142		
b-BHC	50		31		ug/Kg	62			42-156		
d-BHC	50		31		ug/Kg	62			37-161		
Dieldrin	50		30		ug/Kg	60			47-151		
Endosulfan I	50		32		ug/Kg	64			47-141		
Endosulfan II	50		29		ug/Kg	58			44-156		
Endosulfan sulfate	50		31		ug/Kg	62			43-157		
Endrin	50		33		ug/Kg	66			47-160		
Endrin aldehyde	50		16		ug/Kg	32			32-127		
Endrin Ketone	50		29		ug/Kg	58			48-159		
Heptachlor	50		30		ug/Kg	60			50-144		
Heptachlor epoxide	50		29		ug/Kg	58			48-145		
Lindane (Gamma-BHC)	50		33		ug/Kg	66			47-151		
Methoxychlor	50		32		ug/Kg	64			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213156MS1, QC1213156MSD1												
4,4'-DDD	ND	50	50	33	29	ug/Kg	66	58	12.9	43-172	20	
4,4'-DDE	ND	50	50	36	33	ug/Kg	72	66	8.7	44-163	20	
4,4'-DDT	ND	50	50	39	34	ug/Kg	78	68	13.7	40-158	20	
a-BHC	ND	50	50	36	33	ug/Kg	72	66	8.7	45-150	20	

QCBatchID: **QC1213156**

Analyst: bmorris

Method: EPA 8081A

Matrix: Solid

Analyzed: 01/02/2020

Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213156MS1, QC1213156MSD1											Source: 423096-001	
Aldrin	ND	50	50	34	32	ug/Kg	68	64	6.1	46-142	20	
b-BHC	ND	50	50	33	31	ug/Kg	66	62	6.3	42-156	20	
d-BHC	ND	50	50	33	31	ug/Kg	66	62	6.3	37-161	20	
Dieldrin	ND	50	50	34	31	ug/Kg	68	62	9.2	47-151	20	
Endosulfan I	ND	50	50	37	33	ug/Kg	74	66	11.4	47-141	20	
Endosulfan II	ND	50	50	34	31	ug/Kg	68	62	9.2	44-156	20	
Endosulfan sulfate	ND	50	50	35	30	ug/Kg	70	60	15.4	43-157	20	
Endrin	ND	50	50	36	33	ug/Kg	72	66	8.7	47-160	20	
Endrin aldehyde	ND	50	50	27	23	ug/Kg	54	46	16.0	32-127	20	
Endrin Ketone	ND	50	50	33	29	ug/Kg	66	58	12.9	48-159	20	
Heptachlor	ND	50	50	35	32	ug/Kg	70	64	9.0	50-144	20	
Heptachlor epoxide	ND	50	50	34	31	ug/Kg	68	62	9.2	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	37	35	ug/Kg	74	70	5.6	47-151	20	
Methoxychlor	ND	50	50	44	41	ug/Kg	88	82	7.1	36-182	20	

QCBatchID: QC1213157	Analyst: bmorris	Method: EPA 8082
Matrix: Solid	Analyzed: 01/02/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213157MB1				
PCB-1016	ND	ug/Kg	50	
PCB-1221	ND	ug/Kg	50	
PCB-1232	ND	ug/Kg	50	
PCB-1242	ND	ug/Kg	50	
PCB-1248	ND	ug/Kg	50	
PCB-1254	ND	ug/Kg	50	
PCB-1260	ND	ug/Kg	50	
PCB-1262	ND	ug/Kg	50	
PCB-1268	ND	ug/Kg	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213157LCS1											
PCB-1016	500		410		ug/Kg	82			70-130		
PCB-1260	500		400		ug/Kg	80			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213157MS1, QC1213157MSD1												
PCB-1016	ND	500	500	370	410	ug/Kg	74	82	10.3	70-130	20	
PCB-1260	ND	500	500	360	420	ug/Kg	72	84	15.4	70-130	20	

Source: 423096-001


Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

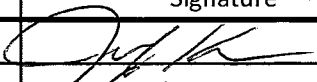

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds


ENTHALPY ANALYTICAL			Chain of Custody Record			Turn Around Time (Rush by advanced notice only)					
931 W. Barkley Ave., Orange, CA 92868			Lab No: 423106	Page: 1 of 2		Standard: <input checked="" type="checkbox"/>	4 Day: <input type="checkbox"/>	3 Day: <input type="checkbox"/>			
Phone: (714) 771-6900 Fax: (714) 538-1209						2 Day: <input type="checkbox"/>	1 Day: <input type="checkbox"/>	Same Day: <input type="checkbox"/>			
Billing: Enthalpy Analytical 1 Park Plaza, Suite 1000 Irvine, CA 92614		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other			Preservatives: 1 = Na ₂ S ₂ O ₃ 2 = HCl 3 = HNO ₃ 4 = H ₂ SO ₄ 5 = NaOH 6 = Other						

CUSTOMER INFORMATION			PROJECT INFORMATION			Analysis Request					Test Instructions / Comments		
Company:	ENGEO	Name:	Former La Puerta School			8270 SIM - SVOCs	8015 M TPH-g, TPH-d, TPH-mo	8260 M -VOCs	8082 M - PCBs	6010/7147A - CAM-17 Metals	8081 M - Organochlorine pesticides (OCPS)		
Report To:	Adrianna Lundberg	Number:	16664.000.000										
Email:	alundberg@engeo.com	P.O. #:											
Address:	6 Morgan Suite 162	Address:	2475 Forbes Avenue										
	Irvine, CA		Claremont, CA 92660										
Phone:	949.579.2268	Global ID:											
Fax:		Sampled By:	Jennifer Knipper										

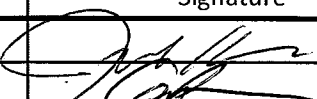
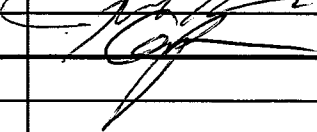
Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	8270 SIM - SVOCs	8015 M TPH-g, TPH-d, TPH-mo	8260 M -VOCs	8082 M - PCBs	6010/7147A - CAM-17 Metals	8081 M - Organochlorine pesticides (OCPS)	Test Instructions / Comments
1 01-SP-A3	12/23/2019	0900	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	4-pt comp for PCBs, OCPS, CAM-17 metals,
2 01-SP-A4	12/23/2019	0910	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	
3 01-SP-A5	12/23/2019	0915	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	
4 01-SP-B3	12/23/2019	0925	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	
5												
6 01-SP-B1	12/23/2019	0935	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	4-pt comp for PCBs, OCPS, CAM-17 metals,
7 01-SP-B2	12/23/2019	0940	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	
8 01-SP-C1	12/23/2019	0950	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	
9 01-SP-C2	12/23/2019	1000	soil	1 / 2x6	-	✓	✓	✓	✓	✓	✓	
10												

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Jennifer Knipper	ENGEO / Staff Geologist	12/23/2019 / 1216
1 Received By:		B Kim	EA	12/23/19 1216
2 Relinquished By:				
2 Received By:				
3 Relinquished By:				
3 Received By:				

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ENTHALPY ANALYTICAL		Chain of Custody Record			Turn Around Time (Rush by advanced notice only)						
931 W. Barkley Ave., Orange, CA 92868 Phone: (714) 771-6900 Fax: (714) 538-1209		Lab No:				Standard:	<input checked="" type="checkbox"/>	4 Day:	<input type="checkbox"/>	3 Day:	<input type="checkbox"/>
Billing: Enthalpy Analytical 1 Park Plaza, Suite 1000 Irvine, CA 92614		Page:	2	of	2	2 Day:	<input type="checkbox"/>	1 Day:	<input type="checkbox"/>	Same Day:	<input type="checkbox"/>
Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other					Preservatives: 1 = Na ₂ S ₂ O ₃ 2 = HCl 3 = HNO ₃ 4 = H ₂ SO ₄ 5 = NaOH 6 = Other						

CUSTOMER INFORMATION			PROJECT INFORMATION				Analysis Request						Test Instructions / Comments	
Company:	ENGEO	Name:	Former La Puerta School				8270 SIM - SVOCs	8015 M TPH-g, TPH-d, TPH-mo	8260 M - VOCs	8082 M - PCBs	6010/7147A - CAM-17 Metals	8081 M - Organochlorine pesticides (OCPS)		
Report To:	Adrianna Lundberg	Number:	16664.000.000											
Email:	alundberg@engeo.com	P.O. #:												
Address:	6 Morgan Suite 162	Address:	2475 Forbes Avenue											
	Irvine, CA		Claremont, CA 92660											
Phone:	949.579.2268	Global ID:												
Fax:		Sampled By:	Jennifer Knipper											
Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	8270 SIM - SVOCs	8015 M TPH-g, TPH-d, TPH-mo	8260 M - VOCs	8082 M - PCBs	6010/7147A - CAM-17 Metals	8081 M - Organochlorine pesticides (OCPS)			
1	01-SP-B4	12/23/2019	1015	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4-pt comp for PCBs, OCPS, CAM-17 metals,
2	01-SP-B5	12/23/2019	1020	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	01-SP-C4	12/23/2019	1030	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	01-SP-C5	12/23/2019	1035	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5														
6	01-SP-C3	12/23/2019	1045	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4-pt comp for PCBs, OCPS, CAM-17 metals,
7	01-SP-D2	12/23/2019	1050	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	01-SP-D3	12/23/2019	1055	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9	01-SP-D4	12/23/2019	1105	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10														

	Signature	Print Name	Company / Title	Date / Time
¹ Relinquished By:		Jennifer Knipper	ENGEO / Staff Geologist	12/23/2019 / 1210
¹ Received By:		G. Kim	EA	12/23/19 1210
² Relinquished By:				
² Received By:				
³ Relinquished By:				
³ Received By:				

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ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: EngeoProject: Former La Puerta SchoolDate Received: 12/23/19Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____Sample Temp (°C), One from each cooler: #1: 18.6 #2: _____ #3: _____ #4: _____*(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)*

Shipping Information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____Cooler Temp (°C): #1: 0.2 #2: _____ #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____ Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: [Signature] Date: 12/23/19



Enthalpy Analytical, LLC

931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com



Client: ENGEO Inc.
Address: 6 Morgan, Suite 162
Irvine, CA 92618-1922

Lab Request: 424016
Report Date: 01/31/2020
Date Received: 01/21/2020
Client ID: 15790

Attn: Adrianna Lundberg

Comments: Former La Puerta School
16664.000.000

Revised Report

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
424016-001	02-SP-01
424016-002	02-SP-02
424016-003	02-SP-03
424016-004	02-SP-04
424016-005	02-SP-05
424016-006	02-SP-06
424016-007	02-SP-07
424016-008	02-SP-08
424016-009	4-pt comp 02-SP-01, 02, 03, 04
424016-010	4-pt comp 02-SP-05, 06, 07, 08

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Diane Galvan, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date received.

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Detections Summary

Sample #: 424016-001 **Client Sample #:** 02-SP-01

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8015M	TPH (C13 to C28) (SGT)	11.4	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	24.6	1	20	mg/Kg	

Sample #: 424016-002 **Client Sample #:** 02-SP-02

No analyte detected

Sample #: 424016-003 **Client Sample #:** 02-SP-03

No analyte detected

Sample #: 424016-004 **Client Sample #:** 02-SP-04

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8015M	TPH (C13 to C28) (SGT)	12.0	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	42.6	1	20	mg/Kg	

Sample #: 424016-005 **Client Sample #:** 02-SP-05

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8015M	TPH (C13 to C28) (SGT)	36.8	1	10	mg/Kg	
EPA 8015M	TPH (C29 to C 40) (SGT)	46.2	1	20	mg/Kg	

Sample #: 424016-006 **Client Sample #:** 02-SP-06

No analyte detected

Sample #: 424016-007 **Client Sample #:** 02-SP-07

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Benz(a)anthracene	17	1	10	ug/Kg	
EPA 8270CM	Benzo(a)pyrene	18	1	10	ug/Kg	
EPA 8270CM	Benzo(b)fluoranthene	12	1	10	ug/Kg	
EPA 8270CM	Benzo(k)fluoranthene	14	1	10	ug/Kg	
EPA 8270CM	Chrysene	17	1	10	ug/Kg	
EPA 8270CM	Fluoranthene	29	1	10	ug/Kg	
EPA 8270CM	Phenanthrene	10	1	10	ug/Kg	
EPA 8270CM	Pyrene	31	1	10	ug/Kg	

Sample #: 424016-008 **Client Sample #:** 02-SP-08

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 8270CM	Benz(a)anthracene	53	1	10	ug/Kg	
EPA 8270CM	Benzo(a)pyrene	47	1	10	ug/Kg	
EPA 8270CM	Benzo(b)fluoranthene	33	1	10	ug/Kg	
EPA 8270CM	Benzo(g,h,i)perylene	16	1	10	ug/Kg	
EPA 8270CM	Benzo(k)fluoranthene	42	1	10	ug/Kg	
EPA 8270CM	Chrysene	53	1	10	ug/Kg	
EPA 8270CM	Fluoranthene	81	1	10	ug/Kg	
EPA 8270CM	Indeno(1,2,3-cd)pyrene	20	1	10	ug/Kg	
EPA 8270CM	Phenanthrene	27	1	10	ug/Kg	
EPA 8270CM	Pyrene	83	1	10	ug/Kg	

Sample #: 424016-009 **Client Sample #:** 4-pt comp 02-SP-01, 02, 03, 04

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	2.16	1	1	mg/Kg	
EPA 6010B	Barium	93.3	1	1	mg/Kg	

Detections Summary

Sample #: 424016-009

Client Sample #: 4-pt comp 02-SP-01, 02, 03, 04

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Chromium	14.2	1	1	mg/Kg	
EPA 6010B	Cobalt	7.59	1	0.5	mg/Kg	
EPA 6010B	Copper	15.2	1	1	mg/Kg	
EPA 6010B	Lead	9.77	1	1	mg/Kg	
EPA 6010B	Nickel	12.1	1	1.5	mg/Kg	
EPA 6010B	Vanadium	34.0	1	0.5	mg/Kg	
EPA 6010B	Zinc	52.3	1	5	mg/Kg	
EPA 8081A	4,4'-DDE	12	2	10	ug/Kg	D2

Sample #: 424016-010

Client Sample #: 4-pt comp 02-SP-05, 06, 07, 08

<u>Method</u>	<u>Analyte</u>	<u>Result</u>	<u>DF</u>	<u>RDL</u>	<u>Units</u>	<u>Notes</u>
EPA 6010B	Arsenic	5.90	1	1	mg/Kg	
EPA 6010B	Barium	73.7	1	1	mg/Kg	
EPA 6010B	Cadmium	0.63	1	0.5	mg/Kg	
EPA 6010B	Chromium	18.4	1	1	mg/Kg	
EPA 6010B	Cobalt	10.5	1	0.5	mg/Kg	
EPA 6010B	Copper	22.9	1	1	mg/Kg	
EPA 6010B	Lead	19.4	1	1	mg/Kg	
EPA 6010B	Nickel	16.0	1	1.5	mg/Kg	
EPA 6010B	Vanadium	42.4	1	0.5	mg/Kg	
EPA 6010B	Zinc	75.9	1	5	mg/Kg	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 12:40	Site:	
Sample #: <u>424016-001</u>	Client Sample #: 02-SP-01	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	11.4	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	24.6	1	20	mg/Kg		01/27/20	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	79		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 12:40	Site:	
Sample #: 424016-001	Client Sample #: 02-SP-01	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	98	66.7-166.6	
4-Bromofluorobenzene (SUR)	97	70-145	
Dibromofluoromethane (SUR)	96	70-145	
Toluene-d8 (SUR)	100	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896						
1-Methylnaphthalene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
2-Methylnaphthalene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthylene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Anthracene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benz(a)anthracene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(a)pyrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(b)fluoranthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(g,h,i)perylene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(k)fluoranthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Chrysene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Dibenz(a,h)anthracene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluoranthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluorene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Naphthalene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Phenanthrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Pyrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	94	30-120	
Nitrobenzene-d5 (SUR)	67	27-125	
p-Terphenyl (SUR)	81	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 12:30	Site:	
Sample #: <u>424016-002</u>	Client Sample #: 02-SP-02	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/27/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	78		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 12:30	Site:	
Sample #: 424016-002	Client Sample #: 02-SP-02	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	98	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	98	70-145	
Toluene-d8 (SUR)	99	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896						
1-Methylnaphthalene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
2-Methylnaphthalene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthylene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Anthracene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benz(a)anthracene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(a)pyrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(b)fluoranthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(g,h,i)perylene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(k)fluoranthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Chrysene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Dibenz(a,h)anthracene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluoranthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluorene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Naphthalene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Phenanthrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Pyrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	77	30-120	
Nitrobenzene-d5 (SUR)	73	27-125	
p-Terphenyl (SUR)	67	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 12:20	Site:	
Sample #: <u>424016-003</u>	Client Sample #: 02-SP-03	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/27/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacontane (SUR)	81		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 12:20	Site:	
Sample #: <u>424016-003</u>	Client Sample #: 02-SP-03	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	97	66.7-166.6	
4-Bromofluorobenzene (SUR)	100	70-145	
Dibromofluoromethane (SUR)	97	70-145	
Toluene-d8 (SUR)	101	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896						
1-Methylnaphthalene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
2-Methylnaphthalene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthylene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Anthracene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benz(a)anthracene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(a)pyrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(b)fluoranthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(g,h,i)perylene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(k)fluoranthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Chrysene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Dibenz(a,h)anthracene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluoranthene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluorene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Naphthalene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Phenanthrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2
Pyrene	ND	2	20	ug/Kg	01/24/20	01/30/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	58	30-120	
Nitrobenzene-d5 (SUR)	50	27-125	
p-Terphenyl (SUR)	72	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 12:10	Site:	
Sample #: <u>424016-004</u>	Client Sample #: 02-SP-04	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	100		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	12.0	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	42.6	1	20	mg/Kg		01/27/20	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	80		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 12:10	Site:	
Sample #: 424016-004	Client Sample #: 02-SP-04	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	98	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	96	70-145	
Toluene-d8 (SUR)	100	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896						
1-Methylnaphthalene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
2-Methylnaphthalene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthylene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Anthracene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Benz(a)anthracene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(a)pyrene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(b)fluoranthene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(g,h,i)perylene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(k)fluoranthene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Chrysene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Dibenz(a,h)anthracene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluoranthene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluorene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Naphthalene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Phenanthrene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2
Pyrene	ND	20	200	ug/Kg	01/24/20	01/30/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	80	30-120	
Nitrobenzene-d5 (SUR)	49	27-125	
p-Terphenyl (SUR)	83	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 11:45	Site:	
Sample #: <u>424016-005</u>	Client Sample #: 02-SP-05	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	85		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	36.8	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	46.2	1	20	mg/Kg		01/27/20	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	109		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 11:45	Site:	
Sample #: <u>424016-005</u>	Client Sample #: 02-SP-05	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	99	66.7-166.6	
4-Bromofluorobenzene (SUR)	102	70-145	
Dibromofluoromethane (SUR)	97	70-145	
Toluene-d8 (SUR)	104	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896						
1-Methylnaphthalene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
2-Methylnaphthalene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthylene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Anthracene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benz(a)anthracene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(a)pyrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(b)fluoranthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(g,h,i)perylene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(k)fluoranthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Chrysene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Dibenz(a,h)anthracene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluoranthene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluorene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Naphthalene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Phenanthrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2
Pyrene	ND	10	100	ug/Kg	01/24/20	01/30/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	67	30-120	
Nitrobenzene-d5 (SUR)	53	27-125	
p-Terphenyl (SUR)	75	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 11:55	Site:	
Sample #: <u>424016-006</u>	Client Sample #: 02-SP-06	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	90		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/27/20	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacotane (SUR)	85		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 11:55	Site:	
Sample #: 424016-006	Client Sample #: 02-SP-06	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	101	66.7-166.6	
4-Bromofluorobenzene (SUR)	99	70-145	
Dibromofluoromethane (SUR)	98	70-145	
Toluene-d8 (SUR)	100	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896						
1-Methylnaphthalene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
2-Methylnaphthalene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Acenaphthylene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Anthracene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Benz(a)anthracene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(a)pyrene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(b)fluoranthene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(g,h,i)perylene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Benzo(k)fluoranthene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Chrysene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Dibenz(a,h)anthracene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluoranthene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Fluorene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Indeno(1,2,3-cd)pyrene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Naphthalene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Phenanthrene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2
Pyrene	ND	5	50	ug/Kg	01/24/20	01/30/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
2-Fluorobiphenyl (SUR)	44	30-120	
Nitrobenzene-d5 (SUR)	35	27-125	
p-Terphenyl (SUR)	45	33-155	

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 11:25	Site:	
Sample #: <u>424016-007</u>	Client Sample #: 02-SP-07	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
4-Bromofluorobenzene (SUR)	100		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/27/20	TW
<i>Surrogate</i>	<i>% Recovery</i>		<i>Limits</i>	<i>Notes</i>			
Triacontane (SUR)	77		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 11:25	Site:	
Sample #: <u>424016-007</u>	Client Sample #: 02-SP-07	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	99	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	97	70-145	
Toluene-d8 (SUR)	101	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QC Batch ID: QC1213896					
1-Methylnaphthalene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
2-Methylnaphthalene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Acenaphthene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Acenaphthylene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Anthracene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benz(a)anthracene	17	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(a)pyrene	18	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(b)fluoranthene	12	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(g,h,i)perylene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(k)fluoranthene	14	1	10	ug/Kg	01/24/20	01/30/20	CBR
Chrysene	17	1	10	ug/Kg	01/24/20	01/30/20	CBR
Dibenz(a,h)anthracene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Fluoranthene	29	1	10	ug/Kg	01/24/20	01/30/20	CBR
Fluorene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Indeno(1,2,3-cd)pyrene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Naphthalene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Phenanthrene	10	1	10	ug/Kg	01/24/20	01/30/20	CBR
Pyrene	31	1	10	ug/Kg	01/24/20	01/30/20	CBR
<u>Surrogate</u>	<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>				
2-Fluorobiphenyl (SUR)	43	30-120					
Nitrobenzene-d5 (SUR)	45	27-125					
p-Terphenyl (SUR)	43	33-155					

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020 11:35	Site:	
Sample #: <u>424016-008</u>	Client Sample #: 02-SP-08	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 8015B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213800				
TPH (C6 to C12)	ND	1	3	mg/Kg		01/22/20	EW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
4-Bromofluorobenzene (SUR)	95		60-140				
Method: EPA 8015M	Prep Method: EPA 3580A		QCBatchID: QC1213881				
TPH (C13 to C28) (SGT)	ND	1	10	mg/Kg		01/27/20	TW
TPH (C29 to C 40) (SGT)	ND	1	20	mg/Kg		01/27/20	TW
<u>Surrogate</u>	<u>% Recovery</u>		<u>Limits</u>	<u>Notes</u>			
Triacotane (SUR)	78		50-150				
Method: EPA 8260B <i>NELAC</i>	Prep Method: EPA 5030		QCBatchID: QC1213785				
1,1,1,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,1-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2,2-Tetrachloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1,2-Trichlorotrifluoroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
1,1-Dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,3-Trichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2,4-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromo-3-chloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dibromoethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloroethane	ND	1	5	ug/Kg		01/22/20	LZ
1,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,3,5-Trimethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
1,3-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
1,4-Dichlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
2,2-Dichloropropane	ND	1	5	ug/Kg		01/22/20	LZ
2-Butanone (MEK)	ND	1	100	ug/Kg		01/22/20	LZ
2-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Chlorotoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Isopropyltoluene	ND	1	5	ug/Kg		01/22/20	LZ
4-Methyl-2-pentanone (MIBK)	ND	1	5	ug/Kg		01/22/20	LZ
Acetone	ND	1	100	ug/Kg		01/22/20	LZ
Allyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Benzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Bromochloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromodichloromethane	ND	1	5	ug/Kg		01/22/20	LZ
Bromoform	ND	1	5	ug/Kg		01/22/20	LZ
Bromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Carbon Tetrachloride	ND	1	5	ug/Kg		01/22/20	LZ
Chlorobenzene	ND	1	5	ug/Kg		01/22/20	LZ
Chlorodibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroethane	ND	1	5	ug/Kg		01/22/20	LZ
Chloroform	ND	1	5	ug/Kg		01/22/20	LZ
Chloromethane	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,2-Dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
cis-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020 11:35	Site:	
Sample #: <u>424016-008</u>	Client Sample #: 02-SP-08	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Dibromomethane	ND	1	5	ug/Kg		01/22/20	LZ
Dichlorodifluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Ethylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Hexachlorobutadiene	ND	1	5	ug/Kg		01/22/20	LZ
Isopropylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
m and p-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Methylene chloride	ND	1	5	ug/Kg		01/22/20	LZ
Methyl-t-butyl Ether (MTBE)	ND	1	5	ug/Kg		01/22/20	LZ
Naphthalene	ND	1	5	ug/Kg		01/22/20	LZ
N-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
N-propylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
o-Xylene	ND	1	5	ug/Kg		01/22/20	LZ
Sec-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Styrene	ND	1	5	ug/Kg		01/22/20	LZ
Tert-butylbenzene	ND	1	5	ug/Kg		01/22/20	LZ
Tetrachloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Toluene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,2-dichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,3-dichloropropene	ND	1	5	ug/Kg		01/22/20	LZ
trans-1,4-dichloro-2-butene	ND	1	5	ug/Kg		01/22/20	LZ
Trichloroethene	ND	1	5	ug/Kg		01/22/20	LZ
Trichlorofluoromethane	ND	1	5	ug/Kg		01/22/20	LZ
Vinyl Chloride	ND	1	5	ug/Kg		01/22/20	LZ
Xylenes (Total)	ND	1	5	ug/Kg		01/22/20	LZ

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	100	66.7-166.6	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromofluoromethane (SUR)	97	70-145	
Toluene-d8 (SUR)	99	70-145	

Method: EPA 8270CM	Prep Method: EPA 3545	QCBatchID: QC1213896					
1-Methylnaphthalene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
2-Methylnaphthalene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Acenaphthene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Acenaphthylene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Anthracene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benz(a)anthracene	53	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(a)pyrene	47	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(b)fluoranthene	33	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(g,h,i)perylene	16	1	10	ug/Kg	01/24/20	01/30/20	CBR
Benzo(k)fluoranthene	42	1	10	ug/Kg	01/24/20	01/30/20	CBR
Chrysene	53	1	10	ug/Kg	01/24/20	01/30/20	CBR
Dibenz(a,h)anthracene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Fluoranthene	81	1	10	ug/Kg	01/24/20	01/30/20	CBR
Fluorene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Indeno(1,2,3-cd)pyrene	20	1	10	ug/Kg	01/24/20	01/30/20	CBR
Naphthalene	ND	1	10	ug/Kg	01/24/20	01/30/20	CBR
Phenanthrene	27	1	10	ug/Kg	01/24/20	01/30/20	CBR
Pyrene	83	1	10	ug/Kg	01/24/20	01/30/20	CBR
Surrogate	% Recovery	Limits	Notes				
2-Fluorobiphenyl (SUR)	58	30-120					
Nitrobenzene-d5 (SUR)	60	27-125					
p-Terphenyl (SUR)	67	33-155					

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020	Site:	
Sample #: <u>424016-009</u>	Client Sample #: 4-pt comp 02-SP-01, 02, 03, 04	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
Method: EPA 6010B <i>NELAC</i>	Prep Method: EPA 3050B		QCBatchID: QC1213861				
Antimony	ND	1	3	mg/Kg		01/24/20	SBW
Arsenic	2.16	1	1	mg/Kg		01/24/20	SBW
Barium	93.3	1	1	mg/Kg		01/24/20	SBW
Beryllium	ND	1	0.5	mg/Kg		01/24/20	SBW
Cadmium	ND	1	0.5	mg/Kg		01/24/20	SBW
Chromium	14.2	1	1	mg/Kg		01/24/20	SBW
Cobalt	7.59	1	0.5	mg/Kg		01/24/20	SBW
Copper	15.2	1	1	mg/Kg		01/24/20	SBW
Lead	9.77	1	1	mg/Kg		01/24/20	SBW
Molybdenum	ND	1	1	mg/Kg		01/24/20	SBW
Nickel	12.1	1	1.5	mg/Kg		01/27/20	SBW
Selenium	ND	1	3	mg/Kg		01/24/20	SBW
Silver	ND	1	0.5	mg/Kg		01/24/20	SBW
Thallium	ND	1	3	mg/Kg		01/24/20	SBW
Vanadium	34.0	1	0.5	mg/Kg		01/24/20	SBW
Zinc	52.3	1	5	mg/Kg		01/24/20	SBW

Method: EPA 7471A <i>NELAC</i>	Prep Method: EPA 7471A		QCBatchID: QC1213864				
Mercury	ND	1	0.14	mg/Kg	01/23/20	01/24/20	

Method: EPA 8081A <i>NELAC</i>	Prep Method: EPA 3546		QCBatchID: QC1213818					
4,4'-DDD	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
4,4'-DDE	12	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
4,4'-DDT	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
a-BHC	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Aldrin	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
b-BHC	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Chlordane (technical)	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
d-BHC	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Dieldrin	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endosulfan I	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endosulfan II	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endosulfan sulfate	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endrin	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endrin aldehyde	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endrin Ketone	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Heptachlor	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Heptachlor epoxide	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Lindane (Gamma-BHC)	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Methoxychlor	ND	2	20	ug/Kg	01/22/20	01/28/20	CBR	D2
Toxaphene	ND	2	200	ug/Kg	01/22/20	01/28/20	CBR	D2

<u>Surrogate</u>	<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>
Decachlorobiphenyl DCB (SUR)	54	24.4-119.9	
Tetrachloro-m-xylene TCMX (SUR)	63	50-150	

Method: EPA 8082 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1213819					
PCB-1016	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1221	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1232	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1242	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1248	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1254	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1260	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1262	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1268	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020	Site:	
Sample #: <u>424016-009</u>	Client Sample #: 4-pt comp 02-SP-01, 02, 03, 04	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
<u>Surrogate</u>							
<i>Decachlorobiphenyl DCB (SUR)</i>		<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>			
		63	50-150				

Matrix: Solid	Client: ENGE0 Inc.	Collector: Client
Sampled: 01/21/2020	Site:	
Sample #: <u>424016-010</u>	Client Sample #: 4-pt comp 02-SP-05, 06, 07, 08	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	QC Batch ID	Analized By	Notes
Method: EPA 6010B <i>NELAC</i>		Prep Method: EPA 3050B		QC Batch ID: QC1213861				
Antimony	ND	1	3	mg/Kg		01/24/20	SBW	
Arsenic	5.90	1	1	mg/Kg		01/24/20	SBW	
Barium	73.7	1	1	mg/Kg		01/24/20	SBW	
Beryllium	ND	1	0.5	mg/Kg		01/24/20	SBW	
Cadmium	0.63	1	0.5	mg/Kg		01/24/20	SBW	
Chromium	18.4	1	1	mg/Kg		01/24/20	SBW	
Cobalt	10.5	1	0.5	mg/Kg		01/24/20	SBW	
Copper	22.9	1	1	mg/Kg		01/24/20	SBW	
Lead	19.4	1	1	mg/Kg		01/24/20	SBW	
Molybdenum	ND	1	1	mg/Kg		01/24/20	SBW	
Nickel	16.0	1	1.5	mg/Kg		01/27/20	SBW	
Selenium	ND	1	3	mg/Kg		01/24/20	SBW	
Silver	ND	1	0.5	mg/Kg		01/24/20	SBW	
Thallium	ND	1	3	mg/Kg		01/24/20	SBW	
Vanadium	42.4	1	0.5	mg/Kg		01/24/20	SBW	
Zinc	75.9	1	5	mg/Kg		01/24/20	SBW	

Method: EPA 7471A <i>NELAC</i>		Prep Method: EPA 7471A		QC Batch ID: QC1213864				
Mercury	ND	1	0.14	mg/Kg	01/23/20	01/24/20		

Method: EPA 8081A <i>NELAC</i>		Prep Method: EPA 3546		QC Batch ID: QC1213818				
4,4'-DDD	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
4,4'-DDE	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
4,4'-DDT	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
a-BHC	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Aldrin	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
b-BHC	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Chlordane (technical)	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
d-BHC	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Dieldrin	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endosulfan I	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endosulfan II	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endosulfan sulfate	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endrin	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endrin aldehyde	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Endrin Ketone	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Heptachlor	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Heptachlor epoxide	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Lindane (Gamma-BHC)	ND	2	10	ug/Kg	01/22/20	01/28/20	CBR	D2
Methoxychlor	ND	2	20	ug/Kg	01/22/20	01/28/20	CBR	D2
Toxaphene	ND	2	200	ug/Kg	01/22/20	01/28/20	CBR	D2

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	62	24.4-119.9	
Tetrachloro-m-xylene TCMX (SUR)	72	50-150	

Method: EPA 8082 <i>NELAC</i>		Prep Method: EPA 3545		QC Batch ID: QC1213819				
PCB-1016	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1221	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1232	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1242	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1248	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1254	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1260	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1262	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2
PCB-1268	ND	2	100	ug/Kg	01/22/20	01/28/20	CBR	D2

Matrix: Solid	Client: ENGEO Inc.	Collector: Client
Sampled: 01/21/2020	Site:	
Sample #: <u>424016-010</u>	Client Sample #: 4-pt comp 02-SP-05, 06, 07, 08	Sample Type:

Analyte	Result	DF	RDL	Units	Prepared	Analyzed By	Notes
<u>Surrogate</u>							
<i>Decachlorobiphenyl DCB (SUR)</i>		<u>% Recovery</u>	<u>Limits</u>	<u>Notes</u>			
		72	50-150				

QCBatchID: **QC1213785**

Analyst: Rlee

Method: EPA 8260B

Matrix: Solid

Analyzed: 01/22/2020

Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213785MB1				
1,1,1,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,1-Trichloroethane	ND	ug/Kg	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	5	
1,1,2-Trichloroethane	ND	ug/Kg	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	5	
1,1-Dichloroethane	ND	ug/Kg	5	
1,1-Dichloroethene	ND	ug/Kg	5	
1,1-Dichloropropene	ND	ug/Kg	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	5	
1,2,3-Trichloropropane	ND	ug/Kg	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	5	
1,2-Dibromoethane	ND	ug/Kg	5	
1,2-Dichlorobenzene	ND	ug/Kg	5	
1,2-Dichloroethane	ND	ug/Kg	5	
1,2-Dichloropropane	ND	ug/Kg	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	5	
1,3-Dichlorobenzene	ND	ug/Kg	5	
1,3-Dichloropropane	ND	ug/Kg	5	
1,4-Dichlorobenzene	ND	ug/Kg	5	
2,2-Dichloropropane	ND	ug/Kg	5	
2-Butanone (MEK)	ND	ug/Kg	100	
2-Chloroethyl Vinyl Ether	ND	ug/Kg	5	
2-Chlorotoluene	ND	ug/Kg	5	
4-Chlorotoluene	ND	ug/Kg	5	
4-Isopropyltoluene	ND	ug/Kg	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	5	
Acetone	ND	ug/Kg	100	
Allyl Chloride	ND	ug/Kg	5	
Benzene	ND	ug/Kg	5	
Bromobenzene	ND	ug/Kg	5	
Bromochloromethane	ND	ug/Kg	5	
Bromodichloromethane	ND	ug/Kg	5	
Bromoform	ND	ug/Kg	5	
Bromomethane	ND	ug/Kg	5	
Carbon Tetrachloride	ND	ug/Kg	5	
Chlorobenzene	ND	ug/Kg	5	
Chlorodibromomethane	ND	ug/Kg	5	
Chloroethane	ND	ug/Kg	5	
Chloroform	ND	ug/Kg	5	
Chloromethane	ND	ug/Kg	5	
cis-1,2-Dichloroethene	ND	ug/Kg	5	
cis-1,3-dichloropropene	ND	ug/Kg	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	5	
Dibromomethane	ND	ug/Kg	5	
Dichlorodifluoromethane	ND	ug/Kg	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	5	
Ethylbenzene	ND	ug/Kg	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	5	
Hexachlorobutadiene	ND	ug/Kg	5	
Isopropylbenzene	ND	ug/Kg	5	

QCBatchID: QC1213785	Analyst: Rlee	Method: EPA 8260B
Matrix: Solid	Analyzed: 01/22/2020	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	RDL	Notes
QC1213785MB1				
m and p-Xylene	ND	ug/Kg	5	
Methylene chloride	ND	ug/Kg	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	5	
Naphthalene	ND	ug/Kg	5	
N-butylbenzene	ND	ug/Kg	5	
N-propylbenzene	ND	ug/Kg	5	
o-Xylene	ND	ug/Kg	5	
Sec-butylbenzene	ND	ug/Kg	5	
Styrene	ND	ug/Kg	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	5	
Tert-butylbenzene	ND	ug/Kg	5	
Tetrachloroethene	ND	ug/Kg	5	
Toluene	ND	ug/Kg	5	
trans-1,2-dichloroethene	ND	ug/Kg	5	
trans-1,3-dichloropropene	ND	ug/Kg	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	5	
Trichloroethene	ND	ug/Kg	5	
Trichlorofluoromethane	ND	ug/Kg	5	
Vinyl Chloride	ND	ug/Kg	5	
Xylenes (Total)	ND	ug/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213785LCS1											
1,1-Dichloroethene	50		49		ug/Kg	98			59-172		
Benzene	50		58		ug/Kg	116			62-137		
Chlorobenzene	50		54		ug/Kg	108			60-133		
Methyl-t-butyl Ether (MTBE)	50		34		ug/Kg	68			62-137		
Toluene	50		56		ug/Kg	112			59-139		
Trichloroethene	50		55		ug/Kg	110			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213785MS1, QC1213785MSD1												
Source: 424016-001												
1,1-Dichloroethene	ND	50	50	48	46	ug/Kg	96	92	4.3	59-172	22	
Benzene	ND	50	50	56	54	ug/Kg	112	108	3.6	62-137	24	
Chlorobenzene	ND	50	50	49	48	ug/Kg	98	96	2.1	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	33	33	ug/Kg	66	66	0.0	62-137	21	
Toluene	ND	50	50	54	52	ug/Kg	108	104	3.8	59-139	21	
Trichloroethene	ND	50	50	56	54	ug/Kg	112	108	3.6	66-142	21	

QCBatchID: QC1213800	Analyst: sandyw	Method: EPA 8015B
Matrix: Solid	Analyzed: 01/22/2020	Instrument: VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213800MB1				
TPH (C6 to C12)	ND	mg/Kg	3	
TPH Gasoline	ND	mg/Kg	3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213800LCS1											
TPH Gasoline	5		5.4		mg/Kg	108			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213800MS1, QC1213800MSD1												
TPH Gasoline	ND	5	5	4.9	4.9	mg/Kg	98	98	0.0	70-130	20	

QCBatchID: QC1213818	Analyst: bmorris	Method: EPA 8081A
Matrix: Solid	Analyzed: 01/22/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213818MB1				
4,4'-DDD	ND	ug/Kg	5	
4,4'-DDE	ND	ug/Kg	5	
4,4'-DDT	ND	ug/Kg	5	
a-BHC	ND	ug/Kg	5	
Aldrin	ND	ug/Kg	5	
b-BHC	ND	ug/Kg	5	
Chlordane (technical)	ND	ug/Kg	50	
d-BHC	ND	ug/Kg	5	
Dieldrin	ND	ug/Kg	5	
Endosulfan I	ND	ug/Kg	5	
Endosulfan II	ND	ug/Kg	5	
Endosulfan sulfate	ND	ug/Kg	5	
Endrin	ND	ug/Kg	5	
Endrin aldehyde	ND	ug/Kg	5	
Endrin Ketone	ND	ug/Kg	5	
Heptachlor	ND	ug/Kg	5	
Heptachlor epoxide	ND	ug/Kg	5	
Lindane (Gamma-BHC)	ND	ug/Kg	5	
Methoxychlor	ND	ug/Kg	10	
Toxaphene	ND	ug/Kg	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213818LCS1											
4,4'-DDD	50		43		ug/Kg	86			43-172		
4,4'-DDE	50		40		ug/Kg	80			44-163		
4,4'-DDT	50		34		ug/Kg	68			40-158		
a-BHC	50		42		ug/Kg	84			45-150		
Aldrin	50		37		ug/Kg	74			46-142		
b-BHC	50		41		ug/Kg	82			42-156		
d-BHC	50		44		ug/Kg	88			37-161		
Dieldrin	50		39		ug/Kg	78			47-151		
Endosulfan I	50		40		ug/Kg	80			47-141		
Endosulfan II	50		40		ug/Kg	80			44-156		
Endosulfan sulfate	50		40		ug/Kg	80			43-157		
Endrin	50		42		ug/Kg	84			47-160		
Endrin aldehyde	50		28		ug/Kg	56			32-127		
Endrin Ketone	50		40		ug/Kg	80			48-159		
Heptachlor	50		40		ug/Kg	80			50-144		
Heptachlor epoxide	50		39		ug/Kg	78			48-145		
Lindane (Gamma-BHC)	50		43		ug/Kg	86			47-151		
Methoxychlor	50		40		ug/Kg	80			36-182		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213818MS1, QC1213818MSD1												
4,4'-DDD	ND	50	50	35	39	ug/Kg	70	78	10.8	43-172	20	
4,4'-DDE	9.3	50	50	38	42	ug/Kg	57	65	10.0	44-163	20	
4,4'-DDT	ND	50	50	33	36	ug/Kg	66	72	8.7	40-158	20	
a-BHC	ND	50	50	36	39	ug/Kg	72	78	8.0	45-150	20	

QCBatchID: **QC1213818**

Analyst: bmorris

Method: EPA 8081A

Matrix: Solid

Analyzed: 01/22/2020

Instrument: SVOA-GC (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213818MS1, QC1213818MSD1											Source: 423857-003	
Aldrin	ND	50	50	33	35	ug/Kg	66	70	5.9	46-142	20	
b-BHC	ND	50	50	35	39	ug/Kg	70	78	10.8	42-156	20	
d-BHC	ND	50	50	37	42	ug/Kg	74	84	12.7	37-161	20	
Dieldrin	ND	50	50	33	36	ug/Kg	66	72	8.7	47-151	20	
Endosulfan I	ND	50	50	34	37	ug/Kg	68	74	8.5	47-141	20	
Endosulfan II	ND	50	50	34	38	ug/Kg	68	76	11.1	44-156	20	
Endosulfan sulfate	ND	50	50	34	37	ug/Kg	68	74	8.5	43-157	20	
Endrin	ND	50	50	35	38	ug/Kg	70	76	8.2	47-160	20	
Endrin aldehyde	ND	50	50	27	30	ug/Kg	54	60	10.5	32-127	20	
Endrin Ketone	ND	50	50	33	36	ug/Kg	66	72	8.7	48-159	20	
Heptachlor	ND	50	50	34	36	ug/Kg	68	72	5.7	50-144	20	
Heptachlor epoxide	ND	50	50	32	35	ug/Kg	64	70	9.0	48-145	20	
Lindane (Gamma-BHC)	ND	50	50	36	40	ug/Kg	72	80	10.5	47-151	20	
Methoxychlor	ND	50	50	34	39	ug/Kg	68	78	13.7	36-182	20	

QCBatchID: QC1213819	Analyst: bmorris	Method: EPA 8082
Matrix: Solid	Analyzed: 01/22/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213819MB1				
PCB-1016	ND	ug/Kg	50	
PCB-1221	ND	ug/Kg	50	
PCB-1232	ND	ug/Kg	50	
PCB-1242	ND	ug/Kg	50	
PCB-1248	ND	ug/Kg	50	
PCB-1254	ND	ug/Kg	50	
PCB-1260	ND	ug/Kg	50	
PCB-1262	ND	ug/Kg	50	
PCB-1268	ND	ug/Kg	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213819LCS1											
PCB-1016	500		460		ug/Kg	92			70-130		
PCB-1260	500		440		ug/Kg	88			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213819MS1, QC1213819MSD1												
PCB-1016	ND	500	500	500	490	ug/Kg	100	98	2.0	70-130	20	
PCB-1260	ND	500	500	420	430	ug/Kg	84	86	2.4	70-130	20	

Source: 423857-003

QCBatchID: QC1213861	Analyst: rvenegas	Method: EPA 6010B
Matrix: Solid	Analyzed: 01/23/2020	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213861MB1				
Antimony	ND	mg/Kg	3	
Arsenic	ND	mg/Kg	1	
Barium	ND	mg/Kg	1	
Beryllium	ND	mg/Kg	0.5	
Cadmium	ND	mg/Kg	0.5	
Chromium	ND	mg/Kg	1	
Cobalt	ND	mg/Kg	0.5	
Copper	ND	mg/Kg	1	
Lead	ND	mg/Kg	1	
Molybdenum	ND	mg/Kg	1	
Nickel	ND	mg/Kg	1.5	
Selenium	ND	mg/Kg	3	
Silver	ND	mg/Kg	0.5	
Thallium	ND	mg/Kg	3	
Vanadium	ND	mg/Kg	0.5	
Zinc	ND	mg/Kg	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes	
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD		
QC1213861LCS1												
Antimony	100		97.8		mg/Kg	98			80-120			
Arsenic	100		93.8		mg/Kg	94			80-120			
Barium	100		106		mg/Kg	106			80-120			
Beryllium	100		92.7		mg/Kg	93			80-120			
Cadmium	100		103		mg/Kg	103			80-120			
Chromium	100		97.2		mg/Kg	97			80-120			
Cobalt	100		102		mg/Kg	102			80-120			
Copper	100		99.4		mg/Kg	99			80-120			
Lead	100		105		mg/Kg	105			80-120			
Molybdenum	100		104		mg/Kg	104			80-120			
Nickel	100		104		mg/Kg	104			80-120			
Selenium	100		92.3		mg/Kg	92			80-120			
Silver	100		98.6		mg/Kg	99			80-120			
Thallium	100		96.9		mg/Kg	97			80-120			
Vanadium	100		110		mg/Kg	110			80-120			
Zinc	100		101		mg/Kg	101			80-120			

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213861MS1, QC1213861MSD1												
Source: 423978-005												
Antimony	0.56	100	100	32.0	43.6	mg/Kg	31	43	30.7	75-125	20	M,D
Arsenic	14.3	100	100	87.8	102	mg/Kg	74	88	15.0	75-125	20	M
Barium	165	100	100	227	238	mg/Kg	62	73	4.7	75-125	20	M
Beryllium	ND	100	100	79.5	89.9	mg/Kg	80	90	12.3	75-125	20	
Cadmium	2.27	100	100	79.5	91.9	mg/Kg	77	90	14.5	75-125	20	
Chromium	42.4	100	100	119	131	mg/Kg	77	89	9.6	75-125	20	
Cobalt	13.5	100	100	90.0	100	mg/Kg	77	87	10.5	75-125	20	
Copper	30.0	100	100	109	120	mg/Kg	79	90	9.6	75-125	20	
Lead	7.88	100	100	88.2	102	mg/Kg	80	94	14.5	75-125	20	
Molybdenum	2.12	100	100	78.3	93.9	mg/Kg	76	92	18.1	75-125	20	

QCBatchID: QC1213861	Analyst: rvenegas	Method: EPA 6010B
Matrix: Solid	Analyzed: 01/23/2020	Instrument: AAICP (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213861MS1, QC1213861MSD1											Source: 423978-005	
Nickel	37.1	100	100	128	129	mg/Kg	91	92	0.8	75-125	20	
Selenium	ND	100	100	69.6	82.1	mg/Kg	70	82	16.5	75-125	20	M
Silver	ND	100	100	75.7	86.1	mg/Kg	76	86	12.9	75-125	20	
Thallium	1.40	100	100	71.4	86.1	mg/Kg	70	85	18.7	75-125	20	M
Vanadium	89.6	100	100	172	191	mg/Kg	82	101	10.5	75-125	20	
Zinc	71.0	100	100	144	153	mg/Kg	73	82	6.1	75-125	20	M

QCBatchID: QC1213864	Analyst: jbarrios	Method: EPA 7471A
Matrix: Solid	Analyzed: 01/23/2020	Instrument: AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213864MB1				
Mercury	ND	mg/Kg	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213864LCS1											
Mercury	0.83		0.77		mg/Kg	93			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213864MS1, QC1213864MSD1												
Mercury	ND	0.83	0.83	0.79	0.89	mg/Kg	95	107	11.9	75-125	20	Source: 424016-009

QCBatchID: QC1213881	Analyst: TWu	Method: EPA 8015M
Matrix: Solid	Analyzed: 01/24/2020	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213881MB1				
TPH (C10 to C28) (SGT)	ND	mg/Kg	10	
TPH (C13 to C28) (SGT)	ND	mg/Kg	10	
TPH (C29 to C 40) (SGT)	ND	mg/Kg	20	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213881LCS1											
TPH (C10 to C28) (SGT)	250		188		mg/Kg	75			36-138		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213881MS1, QC1213881MSD1												
TPH (C10 to C28) (SGT)	11.9	250	250	199	185	mg/Kg	75	69	7.3	70-130	30	M

QCBatchID: QC1213896	Analyst: bmorris	Method: EPA 8270CM
Matrix: Solid	Analyzed: 01/24/2020	Instrument: SVOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1213896MB1				
1-Methylnaphthalene	ND	ug/Kg	10	
2-Methylnaphthalene	ND	ug/Kg	10	
Acenaphthene	ND	ug/Kg	10	
Acenaphthylene	ND	ug/Kg	10	
Anthracene	ND	ug/Kg	10	
Benz(a)anthracene	ND	ug/Kg	10	
Benzo(a)pyrene	ND	ug/Kg	10	
Benzo(b)fluoranthene	ND	ug/Kg	10	
Benzo(g,h,i)perylene	ND	ug/Kg	10	
Benzo(k)fluoranthene	ND	ug/Kg	10	
Chrysene	ND	ug/Kg	10	
Dibenz(a,h)anthracene	ND	ug/Kg	10	
Fluoranthene	ND	ug/Kg	10	
Fluorene	ND	ug/Kg	10	
Indeno(1,2,3-cd)pyrene	ND	ug/Kg	10	
Naphthalene	ND	ug/Kg	10	
Phenanthrene	ND	ug/Kg	10	
Pyrene	ND	ug/Kg	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1213896LCS1											
1-Methylnaphthalene	50		21		ug/Kg	42			28-130		
2-Methylnaphthalene	50		24		ug/Kg	48			33-130		
Acenaphthene	50		29		ug/Kg	58			32-130		
Acenaphthylene	50		19		ug/Kg	38			28-130		
Anthracene	50		21		ug/Kg	42			34-130		
Benz(a)anthracene	50		24		ug/Kg	48			30-132		
Benzo(a)pyrene	50		13		ug/Kg	26			10-138		
Benzo(b)fluoranthene	50		20		ug/Kg	40			32-137		
Benzo(g,h,i)perylene	50		19		ug/Kg	38			27-130		
Benzo(k)fluoranthene	50		21		ug/Kg	42			32-130		
Chrysene	50		23		ug/Kg	46			29-130		
Dibenz(a,h)anthracene	50		23		ug/Kg	46			32-130		
Fluoranthene	50		21		ug/Kg	42			34-130		
Fluorene	50		21		ug/Kg	42			35-130		
Indeno(1,2,3-cd)pyrene	50		19		ug/Kg	38			34-132		
Naphthalene	50		25		ug/Kg	50			25-130		
Phenanthrene	50		25		ug/Kg	50			35-130		
Pyrene	50		21		ug/Kg	42			35-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213896MS1, QC1213896MSD1												
Source: 423911-001												
1-Methylnaphthalene	ND	50	50	37	50	ug/Kg	74	100	29.9	25-130	35	
2-Methylnaphthalene	ND	50	50	42	55	ug/Kg	84	110	26.8	32-133	35	
Acenaphthene	1.9	50	50	35	46	ug/Kg	66	88	27.2	28-134	35	
Acenaphthylene	ND	50	50	38	51	ug/Kg	76	102	29.2	14-157	35	
Anthracene	ND	50	50	33	39	ug/Kg	66	78	16.7	24-156	35	
Benz(a)anthracene	ND	50	50	40	39	ug/Kg	80	78	2.5	26-174	35	

QCBatchID: **QC1213896**

Analyst: bmorris

Method: EPA 8270CM

Matrix: Solid

Analyzed: 01/24/2020

Instrument: SVOA-MS (group)

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1213896MS1, QC1213896MSD1											Source: 423911-001	
Benzo(a)pyrene	ND	50	50	39	36	ug/Kg	78	72	8.0	18-173	35	
Benzo(b)fluoranthene	ND	50	50	38	37	ug/Kg	76	74	2.7	36-164	35	
Benzo(g,h,i)perylene	ND	50	50	36	41	ug/Kg	72	82	13.0	36-130	35	
Benzo(k)fluoranthene	ND	50	50	42	40	ug/Kg	84	80	4.9	36-161	35	
Chrysene	ND	50	50	37	38	ug/Kg	74	76	2.7	40-139	35	
Dibenz(a,h)anthracene	ND	50	50	37	42	ug/Kg	74	84	12.7	38-132	35	
Fluoranthene	1.3	50	50	39	47	ug/Kg	75	91	18.6	28-160	35	
Fluorene	ND	50	50	36	49	ug/Kg	72	98	30.6	27-140	35	
Indeno(1,2,3-cd)pyrene	ND	50	50	40	44	ug/Kg	80	88	9.5	26-154	35	
Naphthalene	ND	50	50	37	50	ug/Kg	74	100	29.9	33-130	35	
Phenanthrene	1.9	50	50	39	41	ug/Kg	74	78	5.0	29-147	35	
Pyrene	1.3	50	50	37	44	ug/Kg	71	85	17.3	26-153	35	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
BQ4	Minor Dissolved Oxygen loss was observed in the blank water check, however, the LCS was within criteria, validating the batch.
BQ5	Minor Dissolved Oxygen loss was observed in the blank water check.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
IR	Inconclusive Result. Legionella is present, however, there is possible non-specific agglutination preventing specific identification.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
L2	LCS did not meet recovery criteria, however, the MS and/or MSD met LCS recovery criteria, validating the batch.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPY ANALYTICAL

931 W. Barkley Ave., Orange, CA 92868
 Phone: (714) 771-6900 Fax: (714) 538-1209

Billing: Enthalpy Analytical
 1 Park Plaza, Suite 1000
 Irvine, CA 92614



Chain of Custody Record

Lab No: **424016**
 Page: **1** of **1**

Matrix: A = Air DW = Drinking Water
 FL = Food Liquid FS = Food Solid L = Liquid
 PP = Pure Product S = Solid SeaW = Sea Water
 SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

Turn Around Time (Rush by advanced notice only)

Standard: 4 Day: 3 Day:
 2 Day: 1 Day: Same Day:

CUSTOMER INFORMATION

Company: ENGEO
 Report To: Adrianna Lundberg
 Email: alundberg@engeo.com
 Address: 6 Morgan Suite 162
 Irvine, CA
 Phone: 949.579.2268
 Fax:
 Name: Former La Puerta School
 Number: 16664.000.000
 P.O. #:
 Address: 2475 Forbes Ave
 Claremont, CA
 Global ID:
 Sampled By: Jennifer Knipper

PROJECT INFORMATION

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	8270C SIM - SVOCs	8015 M -TPH-diesel, gas, motor oil	8260 M -VOCs	8081 M - OCPs	7471A / 6010 -CAM-17 Metals	8082 M -PCBs	Test Instructions / Comments
1 02-SP-01	01/21/20	1240	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	silica gel cleanup
2 02-SP-02	01/21/20	1230	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4-pt comp for PCBs, OCPS, CAM-17 metals
3 02-SP-03	01/21/20	1220	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4 02-SP-04	01/21/20	1210	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6 02-SP-05	01/21/20	1145	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4-pt comp for PCBs, OCPS, CAM-17 metals
7 02-SP-06	01/21/20	1155	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8 02-SP-07	01/21/20	1025	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9 02-SP-08	01/21/20	1135	soil	1 / 2x6	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Signature	Print Name	Company / Title	Date / Time
	Jennifer Knipper	ENGEO / Staff Geologist	01/21/20 1340
	FERNANDEZ Dawn	EA	1/21/20 1340



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: ENGEO

Project: former LA PUERTO SCHOOL

Date Received: 01/21/20

Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2)

Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 5.9 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____

Cooler Temp (°C): #1: 4.7 #2: _____ #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?	/		
Are sample IDs present?	/		
Are sampling dates & times present?	/		
Is a relinquished signature present?	/		
Are the tests required clearly indicated on the COC?	/		
Are custody seals present?		/	
If custody seals are present, were they intact?			/
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			/
Did all samples arrive intact? If no, indicate in Section 4 below.	/		
Did all bottle labels agree with COC? (ID, dates and times)	/		
Were the samples collected in the correct containers for the required tests?	/		
Are the containers labeled with the correct preservatives?			/
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			/
Was a sufficient amount of sample submitted for the requested tests?	/		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: [Signature] Date: 01/21/20

Enthalpy Analytical, a subsidiary of Montrose Environmental Group, Inc.
931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209

www.enthalpy.com/social

Sample Acceptance Checklist - Rev 4, 8/8/2017

APPENDIX C

UCL Output for BaP in the Southwest Stockpile

DRAFT

A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Data Sets with Non-Detects										
2											
3	User Selected Options										
4	Date/Time of Computation		ProUCL 5.12/4/2020 6:09:47 PM								
5	From File		WorkSheet.xls								
6	Full Precision		OFF								
7	Confidence Coefficient		95%								
8	Number of Bootstrap Operations		2000								
9											
10	BaP										
11											
12	General Statistics										
13	Total Number of Observations			24		Number of Distinct Observations			16		
14	Number of Detects			11		Number of Non-Detects			13		
15	Number of Distinct Detects			11		Number of Distinct Non-Detects			5		
16	Minimum Detect			0.0019		Minimum Non-Detect			9.0000E-4		
17	Maximum Detect			0.29		Maximum Non-Detect			0.018		
18	Variance Detects			0.00735		Percent Non-Detects			54.17%		
19	Mean Detects			0.0474		SD Detects			0.0857		
20	Median Detects			0.0056		CV Detects			1.81		
21	Skewness Detects			2.675		Kurtosis Detects			7.682		
22	Mean of Logged Detects			-4.471		SD of Logged Detects			1.824		
23											
24	Normal GOF Test on Detects Only										
25	Shapiro Wilk Test Statistic			0.602		Shapiro Wilk GOF Test					
26	5% Shapiro Wilk Critical Value			0.85		Detected Data Not Normal at 5% Significance Level					
27	Lilliefors Test Statistic			0.298		Lilliefors GOF Test					
28	5% Lilliefors Critical Value			0.251		Detected Data Not Normal at 5% Significance Level					
29	Detected Data Not Normal at 5% Significance Level										
30											
31	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs										
32	KM Mean		0.0225		KM Standard Error of Mean			0.0128			
33	KM SD		0.0599		95% KM (BCA) UCL			0.0448			
34	95% KM (t) UCL		0.0445		95% KM (Percentile Bootstrap) UCL			0.0467			
35	95% KM (z) UCL		0.0436		95% KM Bootstrap t UCL			0.0911			
36	90% KM Chebyshev UCL		0.061		95% KM Chebyshev UCL			0.0784			
37	97.5% KM Chebyshev UCL		0.103		99% KM Chebyshev UCL			0.15			
38											
39	Gamma GOF Tests on Detected Observations Only										
40	A-D Test Statistic		0.827		Anderson-Darling GOF Test						
41	5% A-D Critical Value		0.79		Detected Data Not Gamma Distributed at 5% Significance Level						
42	K-S Test Statistic		0.251		Kolmogorov-Smirnov GOF						
43	5% K-S Critical Value		0.271		Detected data appear Gamma Distributed at 5% Significance Level						
44	Detected data follow Appr. Gamma Distribution at 5% Significance Level										
45											
46	Gamma Statistics on Detected Data Only										
47	k hat (MLE)		0.454		k star (bias corrected MLE)			0.391			
48	Theta hat (MLE)		0.104		Theta star (bias corrected MLE)			0.121			
49	nu hat (MLE)		9.983		nu star (bias corrected)			8.593			
50	Mean (detects)		0.0474								
51	F4-157										

A	B	C	D	E	F	G	H	I	J	K	L
52	Gamma ROS Statistics using Imputed Non-Detects										
53	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs										
54	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)										
55	For such situations, GROS method may yield incorrect values of UCLs and BTVs										
56	This is especially true when the sample size is small.										
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
58	Minimum	0.0019	Mean	0.0271							
59	Maximum	0.29	Median	0.01							
60	SD	0.0597	CV	2.199							
61	k hat (MLE)	0.652	k star (bias corrected MLE)	0.598							
62	Theta hat (MLE)	0.0416	Theta star (bias corrected MLE)	0.0454							
63	nu hat (MLE)	31.29	nu star (bias corrected)	28.71							
64	Adjusted Level of Significance (β)	0.0392									
65	Approximate Chi Square Value (28.71, α)	17.48	Adjusted Chi Square Value (28.71, β)	16.87							
66	95% Gamma Approximate UCL (use when $n \geq 50$)	0.0446	95% Gamma Adjusted UCL (use when $n < 50$)	0.0462							
67											
68	Estimates of Gamma Parameters using KM Estimates										
69	Mean (KM)	0.0225	SD (KM)	0.0599							
70	Variance (KM)	0.00359	SE of Mean (KM)	0.0128							
71	k hat (KM)	0.141	k star (KM)	0.151							
72	nu hat (KM)	6.772	nu star (KM)	7.259							
73	theta hat (KM)	0.159	theta star (KM)	0.149							
74	80% gamma percentile (KM)	0.0247	90% gamma percentile (KM)	0.0668							
75	95% gamma percentile (KM)	0.124	99% gamma percentile (KM)	0.288							
76											
77	Gamma Kaplan-Meier (KM) Statistics										
78	Approximate Chi Square Value (7.26, α)	2.314	Adjusted Chi Square Value (7.26, β)	2.122							
79	95% Gamma Approximate KM-UCL (use when $n \geq 50$)	0.0706	95% Gamma Adjusted KM-UCL (use when $n < 50$)	0.077							
80											
81	Lognormal GOF Test on Detected Observations Only										
82	Shapiro Wilk Test Statistic	0.86	Shapiro Wilk GOF Test								
83	5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level								
84	Lilliefors Test Statistic	0.229	Lilliefors GOF Test								
85	5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level								
86	Detected Data appear Lognormal at 5% Significance Level										
87											
88	Lognormal ROS Statistics Using Imputed Non-Detects										
89	Mean in Original Scale	0.0221	Mean in Log Scale	-6.373							
90	SD in Original Scale	0.0613	SD in Log Scale	2.37							
91	95% t UCL (assumes normality of ROS data)	0.0436	95% Percentile Bootstrap UCL	0.043							
92	95% BCA Bootstrap UCL	0.0573	95% Bootstrap t UCL	0.0865							
93	95% H-UCL (Log ROS)	0.292									
94											
95	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution										
96	KM Mean (logged)	-5.677	KM Geo Mean	0.00342							
97	KM SD (logged)	1.659	95% Critical H Value (KM-Log)	3.527							
98	KM Standard Error of Mean (logged)	0.365	95% H-UCL (KM -Log)	0.0459							
99	KM SD (logged)	1.659	95% Critical H Value (KM-Log)	3.527							
100	KM Standard Error of Mean (logged)	0.365									
101											

	A	B	C	D	E	F	G	H	I	J	K	L
102	DL/2 Statistics											
103	DL/2 Normal						DL/2 Log-Transformed					
104	Mean in Original Scale				0.0231		Mean in Log Scale				-5.514	
105	SD in Original Scale				0.061		SD in Log Scale				1.701	
106	95% t UCL (Assumes normality)				0.0444		95% H-Stat UCL				0.0613	
107	DL/2 is not a recommended method, provided for comparisons and historical reasons											
108												
109	Nonparametric Distribution Free UCL Statistics											
110	Detected Data appear Approximate Gamma Distributed at 5% Significance Level											
111												
112	Suggested UCL to Use											
113	Adjusted KM-UCL (use when $k \leq 1$ and $15 < n < 50$ but $k \leq 1$;				0.077							
114												
115	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
116	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
117												
118	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
119	Recommendations are based upon data size, data distribution, and skewness.											
120	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
121	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
122												