Phase II Environmental Site Assessment

Woodinville West Business Park, Building C
16750 Redmond-Woodinville Road Northeast
Woodinville, Washington

Prepared for:
TA Realty
1301 Dove Street, Suite 860
Newport Beach, CA

Prepared by:
AECOM
1111 Third Ave
Seattle, WA 98101

December 16, 2019

AECOM
1111 Third Avenue, Suite 1600
Seattle, WA 98101

December 16, 2019

Ms. Leah Mogabgab
TA Realty
1301 Dove Street, Suite 860
Newport Beach, CA 92660

Dear Ms. Mogabgab:

This Phase II Environmental Site Assessment Report has been prepared by AECOM on behalf of TA Realty and presents the findings of the site investigation to evaluate the soil and groundwater conditions at Building C of the Woodinville West Business Park located at 16750 Redmond-Woodinville Road Northeast in Woodinville, WA. This investigation was performed in accordance with our proposal dated November 1, 2019. If you have any questions or require additional information, please feel free to contact us.

Yours sincerely,

David Raubvogel
Senior Geologist, LHG

Copy: Kirsten Bradford, AECOM Camarillo Office
Lisa Turturro, Haley & Aldrich

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APPENDICES

1.0 INTRODUCTION

This report presents the results of the Phase II Environmental Site Assessment (ESA) prepared on behalf of TA Realty (TA) to assess the soil and groundwater conditions at the Woodinville West Business Park Building C located at 16750 Redmond-Woodinville Road Northeast in Woodinville, Washington (subject property, Figure 1). A Phase I ESA recently completed by AECOM at the Woodinville West Business Park identified two potential environmental concerns associated with Building C, an oil-water separator (OWS) on the north side of the building that received wastewater from vehicle washing and a former tenant (COIT) dry cleaning operation within the building which reportedly used tetrachloroethylene (PCE) from approximately 1999 to 2007 (AECOM, 2019). Based on these findings, additional assessment of the property was requested by TA to evaluate if any releases from these features could have affected the environmental conditions at the property.

2.0 BACKGROUND

2.1 Site Location and Description

2.1.1 Site Location

The Woodinville West Business Park is located at 16650, 16750, 16928, and 16932 Redmond-Woodinville Road Northeast, Woodinville, King County, Washington (Figure 1). The property is bounded to the west by Redmond-Woodinville Road Northeast, to the east by the Sammamish River, to the north by National Glass and to the south by Saltworks (Figure 2).

2.1.2 Description of Facility

The business park property consists of two contiguous parcels totaling approximately 13.42 acres that is developed with four single story multi-tenant buildings (Buildings A through D). Building C (16750 Redmond-Woodinville Road Northeast) is a one-story office and warehouse building that is approximately 52,755 square feet. The property is owned by Woodinville West LLC. During our recent Phase I ESA, Building C was occupied by Intertek PSI, COIT/Superior Cleaning and Restoration (Superior), and WinCraft. COIT performs rug and upholstery cleaning the majority of which is completed offsite. Only limited rug cleaning and laundering is presently performed onsite (no dry cleaning currently completed at the subject property). Superior has a spray area where materials are pressure washed and water is filtered through a portable triple filtration system and discharged to the sanitary sewer. WinCraft performs screen and sign printing operations and has a spray room which is used for cleaning the screens. Intertek PSI does materials testing and utilizes a moisture control room in their space.

2.2 Topography and Regional Geology

The business park property ranges in elevation from approximately 35 feet above mean sea level (amsl) in the western portion to approximately 25 feet amsl in the east (Figure 1). The subject property is relatively flat with a gradient to the east-northeast toward the Sammamish River which is less than 100 feet to the east of Building C.

The subject property is underlain by Quaternary alluvium consisting of unconsolidated alluvial clay, silt, sand and gravel with some peat deposits. It may contain glacial or colluvial deposits as well. Prior geotechnical borings obtained from the Washington DNR website (DNR, 2019) generally encountered interbedded silty sand, silt and peat and groundwater was noted at less than 15 feet in depth. The groundwater gradient is inferred to be easterly toward the Sammamish River.

2.3 Prior AECOM Phase I Environmental Site Assessment (2019)

A Phase I ESA was conducted in 2019 for TA (AECOM, 2019) as part of acquisition due diligence. During the site visit, no visual evidence of aboveground storage tanks (ASTs), underground storage tanks (USTs) (e.g., vent pipes, fill ports), water wells, dry wells, septic tanks or leach fields were observed on the subject property. An OWS was observed on the north side of Building C which receives wastewater from vehicle washing performed by Intertek PSI. The OWS was also formerly used by COIT for vehicle washing and area rug cleaning activities. The OWS discharges to the municipal sanitary sewer. An as-built drawing of the OWS is provided in Appendix A.

The regulatory database search indicated that the COIT tenant in Building C is listed on hazardous waste, compliance, and the historical cleaner databases. This facility was listed as a carpet and upholstery facility from 1999 through 2006, as a carpet and upholstery cleaning on customer premises business from 2007 through 2010. According to the COIT representative, the former hazardous waste listing was associated with the use of PCE in the dry cleaning machine that was in the space from 1999 until 2007. A photograph of the dry cleaning machine and the approximate location is provided in Appendix A.

This report also summarized the findings of a prior Phase I ESA prepared by AECOM in 2018 and a 2015 Phase I prepared by Adapt Engineering. Recognized environmental conditions (RECs) were not identified in these prior ESA's nor in the recent 2019 AECOM assessment.

3.0 OBJECTIVES AND SCOPE

The 2019 Phase I ESA did not identify RECs associated with the property, however, prior dry cleaning operations inside Building C and the OWS/wash pad on the north side of the building (Figure 3) were considered to be potential environmental concerns which warranted further assessment. The primary objective of the investigation was to assess soil and groundwater conditions adjacent to the OWS and former dry cleaning machine. To accomplish this objective, AECOM implemented the following scope of work:

- Collected environmental samples from five Geoprobe borings. GP-1, GP-2 and GP-3 were completed around the OWS, and GP-4 and GP-5 were completed adjacent to the former dry cleaning machine;
- Analyzed select soil and groundwater samples for volatile organic compounds (VOCs) by EPA Method 8260C. The analytical testing was performed by Fremont Analytical of Seattle, WA; and
- Prepared this report presenting our findings and conclusions regarding the environmental testing conducted by AECOM.

4.0 METHODS OF INVESTIGATIONS

4.1 Sample Location Rationale

The boring locations are shown on Figure 3 and were placed to obtain upgradient/downgradient soil and groundwater quality data. Boring GP-1 through GP-3 are located around the OWS and GP-4 and GP-5 were located adjacent to the former dry cleaning machine. Photographs of the boring locations are presented in Appendix B.

4.2 Drilling and Soil and Groundwater Sampling Procedures

Prior to performing the drilling, the public utility locate (One Call) was requested and AECOM retained GPRS to perform a private locate using ground penetrating radar (GPR) and magnetic geophysical methods. AECOM retained Cascade Drilling of Bothell, WA to provide the drilling and sampling services that were completed on November 16, 2019. Each boring location was also cleared using a hand auger to a depth of approximately 5 feet bgs. Geoprobe® Direct Push Technology (DPT) drilling techniques were used to advance the borings and soil samples were collected continuously using five-foot Geoprobe Macro-Core sampler. The borings were completed between 15 to 24 feet below ground surface (bgs). The boring logs are provided in Appendix C. Ten foot temporary well screens were placed in each boring to facilitate collection of a grab groundwater sample.

Soil samples were collected continuously to the total depth of each boring. Two soil samples were selected from each boring location for chemical analysis based on field screening results. Additional soil samples were collected and archived at the laboratory. Monitoring of drilling and soil sampling activities was conducted by an AECOM geologist who maintained a detailed log of the subsurface materials encountered and recorded organic vapor readings obtained with a photoionization detector (PID). Particular attention was given to noting visible evidence of staining, or other relevant factors indicative of the presence of petroleum hydrocarbons (e.g., odors) or other potential contaminants of concern. Soils were classified in general accordance with the Unified Soil Classification System (USCS). The field screening and soil information was recorded on boring logs that are presented in Appendix C. The soil borings were abandoned in accordance with Ecology regulations and the surface was repaired consistent with the existing conditions.

Volatile organics samples were collected using a 5-gram (g) EnCore® sampler (U.S. Environmental Protection Agency [EPA] Method 5035). Soil samples were transferred to appropriate laboratory provided sample containers. Each sample was properly labeled with a unique sample identification number, placed in a cooler with ice, and submitted to the laboratory for analysis. Chain-of-custody forms were completed and signed by the field representative and accompanied the samples to the laboratory.

A grab groundwater sample was collected from each boring on November 16, 2019 using low-flow purging with a peristaltic pump with dedicated polyethylene tubing. The field monitoring forms are provided in Appendix C. The groundwater samples were then transferred directly into laboratory provided sample containers. Each sample was properly labeled with a unique sample identification

number, placed in a cooler with ice, and submitted to the laboratory for analysis. Chain-of-custody forms were completed and signed by the field representative and accompanied the samples to the laboratory.

4.3 Analytical Methods and Applicable Cleanup Levels

The samples were submitted to Fremont Analytical, an Ecology-accredited laboratory and analyzed for VOCs by Method 8260C. The soil analytical results are summarized in Table 1 and the groundwater analytical results in Table 2, along with their respective Washington Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A/B cleanup levels. The lowest cleanup level for each compound was used for comparison. The MTCA Method A or B values used were obtained from Ecology's CLARC Database (Ecology 2019). The laboratory analytical reports are provided in Appendix D. An AECOM project chemist reviewed all of the analytical data and no data usability issues were identified.

4.4 Investigation Derived Waste (IDW) & Health and Safety Plan

The drilling equipment was decontaminated using a steam cleaner between each boring location and the water generated by the equipment decontamination, groundwater purging was collected and stored in a DOT-approved 55-gallon steel drums. The drum was labeled and are presently stored on site. The IDW water will be disposed of at a licensed treatment facility.

AECOM developed a site health and safety plan for the safe completion of the environmental site activities. The driller was responsible for developing and implementing their site-specific health and safety plan that meets the minimum requirements of CFR 1910.120 and applicable Washington State Department of Labor and Industry (WISHA) requirements. All of the field work was conducted using Level D personal protective equipment (PPE) measures.

5.0 INVESTIGATION FINDINGS

5.1 Subsurface Conditions

The surficial deposits within the site area are mapped as recent alluvium (DNR, 2019) that are associated with the Sammamish River which is less than 100 feet from Building C. The subject property is underlain by fill material consisting of brown silty sand admixtures with trace fine gravel and organic material. The underlying native soils consisted of grey silty fine sand interbedded with silt layers. A peat layer was noted in all of the borings. Groundwater was encountered in the borings ranging from 4.6 feet bgs (GP-4) to 16 feet bgs (GP-2 and 3). The saturated zone was noted within the native soils and the shallow groundwater noted at GP-4 appears to represent confined groundwater conditions.

During field screening of soils, the highest organic vapor PID readings were noted in GP-2 at 9 feet bgs (4.9 ppm). No staining or chemical odors were evident in the soil samples (Appendix C).

5.2 Analytical Results

The laboratory analytical reports are provided in Appendix D. The soil analytical results are summarized

in Table 1 and the groundwater grab samples in Table 2. The analytical findings are presented in the following sections.

5.2.1 Soil

A total of three VOCs were detected at concentrations above method detection limits. PCE was detected in borings GP-4 at 7 feet bgs (0.0922 mg/kg) and GP-5 at 6 feet bgs (0.131 mg/kg). Both of these detections exceeded the MTCA Method A cleanup level of 0.05 mg/kg. The deeper samples collected from these two borings between 12 and 13 feet bgs did not detect PCE. The common biodegradation product, cis-1,2-dichloroethene (DCE) was also detected in these two borings in both the shallow and deeper soil samples (Table 1). DCE was detected well below the applicable cleanup level. One other VOC (2-chlorotoluene) was detected in GP-2 at a concentration well below the applicable cleanup level.

5.2.2 Groundwater

Five VOCs were detected in the groundwater, three of which (2-chlorotoluene, DCE and PCE) were also detected in the soil samples. Vinyl chloride, a common degradation product of PCE was detected in GP-3 and GP-4 at concentrations of 0.351 µg/L and 5.45 µg/L, respectively. Both of these detections exceeded the MTCA Method A cleanup level for vinyl chloride of 0.2 µg/L. PCE was only detected in GP-4 at a concentration of 1.04 µg/L, below the MTCA Method A cleanup level of 5 µg/L. DCE concentrations ranged from 2.05 µg/L (GP-1) to 7.62 µg/L (GP-4) which are below the MTCA Method A cleanup level of 16 µg/L. Low concentrations of 2-chlorotoluene and chloroform were detected in GP-1 and GP-4, respectively, well below applicable cleanup levels.

6.0 CONCLUSIONS

Based on the findings of the soil and groundwater investigation performed at Building C, AECOM has drawn the following conclusions.

6.1 Soil

- No elevated PID levels were noted during field screening of soils that would have indicated a “source” area or obvious release of VOCs.
- PCE was detected in borings completed adjacent to the former dry cleaning machine. PCE was detected in GP-4 (0.0922 mg/kg) at 7 feet bgs and GP-5 (0.131 mg/kg) at 6 feet bgs at concentrations exceeding the applicable MTCA cleanup level. The deeper samples collected between 12 and 13 feet bgs in these borings did not detect PCE.
- DCE (a degradation product of PCE) was detected at low concentrations in both the shallow and deeper soil samples collected from GP-4 and GP-5.

- PCE was not detected in the three borings completed around the OWS (GP-1 through GP-3). The only VOC detected in the soil adjacent to the OWS was chlorotoluene at GP-2 (0.123 mg/kg), well below the applicable MTCA cleanup level.

- The source of the PCE release is not known but based of the levels of PCE noted in the soils, it may be associated with surface spills around the dry cleaning machine area (i.e., during filling of the machine or in storage areas) and migration through the concrete creating a vapor plume and reabsorption to soils.

- The lateral extent of the contamination is not known. Additional assessment would be required to evaluate the extent to soil contamination beneath the building. A sub-slab soil gas survey could be performed to identify if a source area/hot spot exists beneath the building. This data would be used to select optimum soil boring locations for site characterization.

6.2 Groundwater

- Groundwater was encountered in the native soils ranging in depth from 8.5 feet to 16 feet bgs. The shallow groundwater noted at GP-4 at 4.6 feet bgs appears to represent confined groundwater conditions. Based on the topography, the groundwater gradient is inferred to be easterly toward the Sammamish River.

- Five VOCs were detected in the groundwater (Table 2) including the same three found in the soils as well as chlorform and vinyl chloride (a degradation product of PCE);

- Vinyl chloride was detected in GP-3 (0.351 µg/L) and GP-4 (5.45 µg/L) at concentrations exceeding the MTCA cleanup level of 0.2 µg/L. The other VOCs detected in the groundwater were below applicable cleanup levels.

- Based on the presence of DCE and vinyl chloride in the groundwater it appears that the PCE is biodegrading (anerobic). The low concentration of PCE detected in GP-4 (1.04 µg/L) may indicate that much of the PCE in groundwater has biodegraded. The presence of vinyl chloride in the groundwater at GP-3 may indicate another release of PCE. However, it is plausible that the vinyl chloride detected in the area of OWS may be part of a plume emanating from the former dry cleaning machine area.

- Additional assessment will be required to evaluate the extent of VOCs in groundwater. Permanent monitoring wells will be required to confirm the groundwater gradient and provide additional groundwater quality data over time to assess any seasonal fluctuations.

7.0 REFERENCES

AECOM, 2019. Phase I Environmental Site Assessment, Woodinville West, Woodinville, *Washington*, Prepared for the TA Realty. October.

Washington State Department of Ecology, 2007. MTCA Regulations, Chapter 173-340 WAC.

———. 2019. CLARC Database. January.

Table 1
Summary of Soil Analytical Results
TA Realty
Woodinville, Washington

Sample ID	Sample Date	Sample Depth (feet bgs)	VOC (mg/kg)		
			2-Chlorotoluene	Cis-1,2-Dichloroethene	Tetrachloroethene
GP-1	11/16/19	3	0.0206 U	0.0165 U	0.0206 U
	11/16/19	8	0.0306 U	0.0245 U	0.0306 U
GP-2	11/16/19	4	0.0300 U	0.0240 U	0.0300 U
	11/16/19	9.5	0.123	0.0438 U	0.0548 U
GP-3	11/16/19	3.5	0.0256 U	0.0205 U	0.0256 U
	11/16/19	10.5	0.0279 U	0.0223 U	0.0279 U
GP-4	11/16/19	7	0.0283 U	0.0381	**0.0922**
	11/16/19	12	0.0320 U	0.229	0.0320 U
GP-5	11/16/19	6	0.0315 U	0.128	**0.131**
	11/16/19	13	0.0306 U	0.130	0.0306 U
MTCA Method A or B Soil Cleanup Levels			1,600 (B)	160 (B)	0.05 (A)

Notes:

Values in **bold** font indicate that the result reported meets or exceeds the most current MTCA level based on the Ecology website.

Model Toxics Control Act (MTCA) Cleanup Regulation, WAC 173-340. MTCA Method A and B values are from Ecology website CLARC tables dated May 2019

(https://fortress.wa.gov/ecy/clarc/CLARCDataTables.aspx).

(A) MTCA Method A

(B) MTCA Method B

MTCA Method B values are presented only when Method A values are not established.

bgs - below ground surface

U - Compound was analyzed for but not detected above the reporting limit shown.

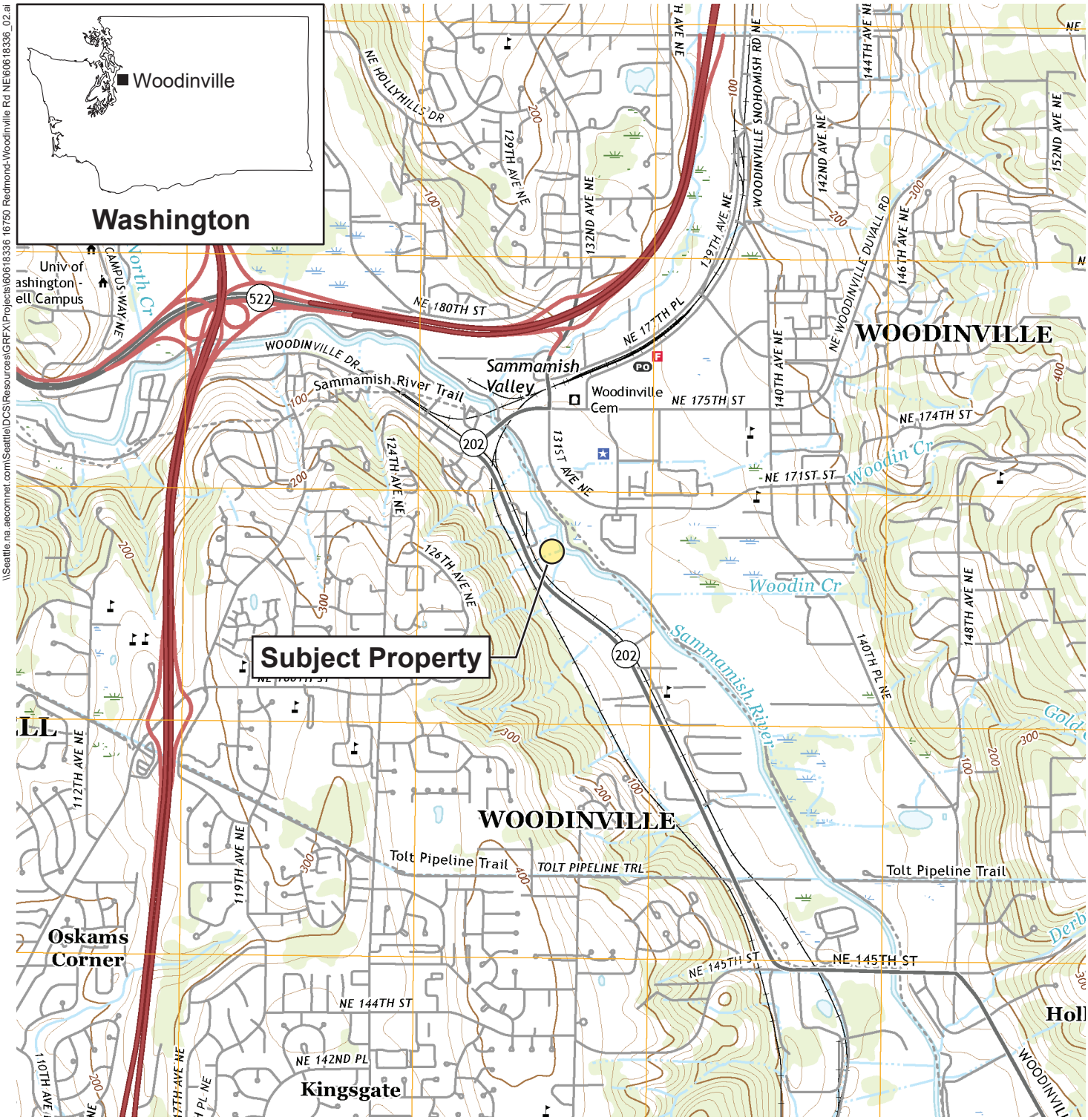
mg/kg - miliogram per kilogram

VOC - volatile organic compound

Table 2
Summary of Groundwater Analytical Results
TA Realty
Woodinville, Washington

Sample ID	Sample Date	VOCs (ug/L)				
		2-Chlorotoluene	Chloroform	Cis-1,2-Dichloroethene	Tetrachloroethene	Vinyl Chloride
GP-1-W	11/16/19	4.81	1.00 U	2.05	1.00 U	0.200 U
GP-2-W	11/16/19	1.00 U	1.00 U	1.00 U	1.00 U	0.200 U
GP-3-W	11/16/19	1.00 U	1.00 U	1.00 U	1.00 U	**0.351**
GP-4-W	11/16/19	1.00 U	2.95	7.62	1.04	**5.45**
GP-5-W	11/16/19	1.00 U	1.00 U	1.00 U	1.00 U	0.200 U
MTCA Method A or B Groundwater Cleanup Level		160 (B)	80 (B)	16 (B)	5 (A)	0.2 (A)

Notes:
Values in **bold** font indicate that the result reported meets or exceeds one or more of the cleanup levels.
Model Toxics Control Act (MTCA) Cleanup Regulation, WAC 173-340. MTCA Method A and B values are from Ecology website CLARC tables dated May 2019 (https://fortress.wa.gov/ecy/clarc/CLARCDataTables.aspx).
(A) MTCA Method A
(B) MTCA Method B
MTCA Method B values are presented only when Method A values are not established.
U - Compound was analyzed for but not detected above the reporting limit shown.
ug/L - microgram per liter
VOC - volatile organic compound



Source: USGS 7.5-minute topographic quadrangles; Kirkland, Washington, 2017; and Bothell, Washington, 2017

0 2,000 4,000

Scale in Feet

Figure 1

Site Location

AECOM

TA Realty
16750 Redmond-Woodinville Rd NE
Woodinville, Washington

National Glass
(17030 Woodinville Redmond Rd NE)

Hollywood Hill Animal Hospital
(17025 Woodinville Redmond Rd NE)

Sammanish River

Sammanish River Trail

NE 171st Street

Campbell Run Apartments
(13305 NE 171st St.)

Building A
(16932)

Drainage Ditch
to River

CMS Construction
(16855 Woodinville Redmond Rd NE)

Building B
(16928)

Woodin Creek Park
(13201 NE 171st St.)

Retention
Pond

Schulyler Rubber Co.
(16901 Woodinville Redmond Rd NE)

Building C
(16750)

Retention
Pond

Building D
(16650)

Saltworks
(16240 Woodinville Redmond Rd NE)

Railroad Track

Woodinville Redmond Road NE

202

Nordick
(16219 Woodinville Redmond Rd NE)

NORTH

OVERVIEW MAP

Legend

- Approximate Property Boundary
- T — Pad-mounted Transformer
- P — Pallet Storage
- D — Solid Waste Dumpster
- C — Cardboard Dumpster
- Pr — Propane Storage
- OWS — Oil-Water Separator
- Sh — Shipping Container
- St — Steel Dumpster

0 150
Feet

Scale 1:1,800
1 inch = 150 feet

Source:
Aerial: Google Earth Pro;
Imagery Date: 5-13-2018

Woodinville West
16650, 16750, 16928, and
16932 Woodinville Redmond Road NE
Woodinville, Washington 98072

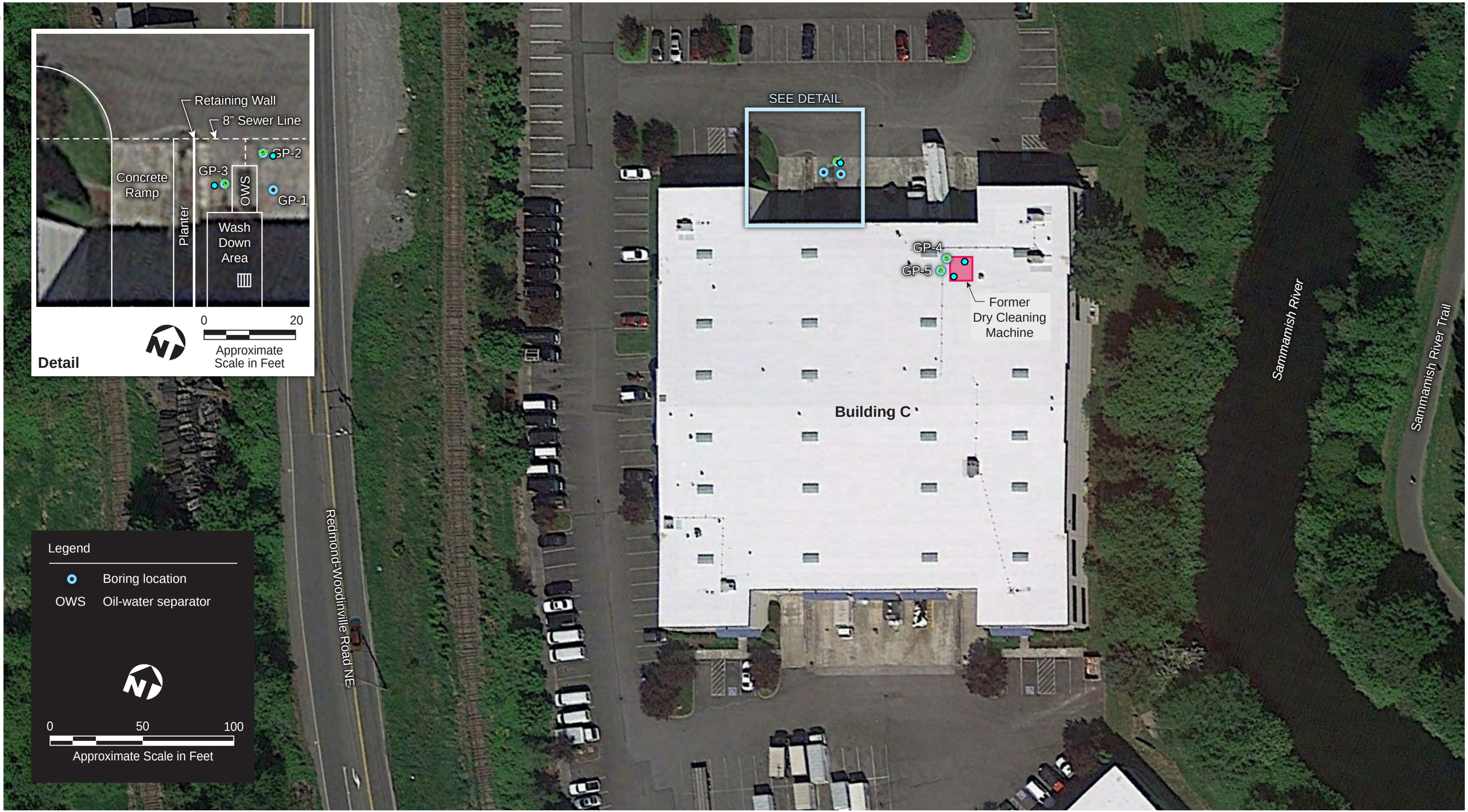
Site Plan

Date: 10/14/2019 Project: 60616142.001

AECOM

Figure 2

Path: \\uscam1vfp001\Projects\Client-Projects\TA_Realty\60538205 - 2017-19 EDD Program\900-CAD\Task 13 - Woodinville, WA\SP-Woodinville1.mxd | Coordinate System: NAD 1983 UTM Zone 10N | User: angela.mcmurtry



Source: Google Earth Pro, imagery dated 5/13/2018

Figure 3

Site Plan and Boring Locations

AECOM

TA Realty
16750 Redmond-Woodinville Rd NE
Woodinville, Washington

APPENDIX A

OIL WATER SEPARATOR AND DRY CLEANING MACHINE INFORMATION

CITY
OF
WOODINVILLE

DEPT: PC

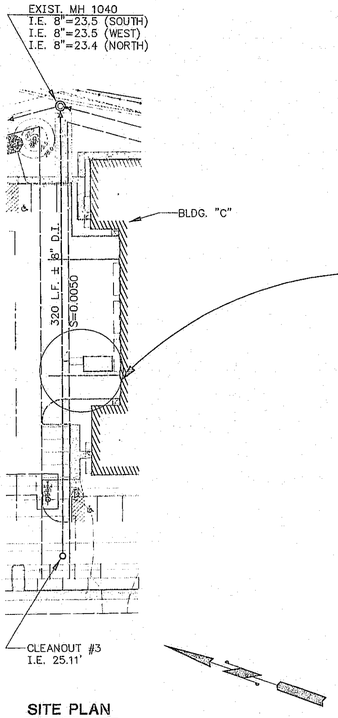
MICRO FILMED

BOX ID 542. 36

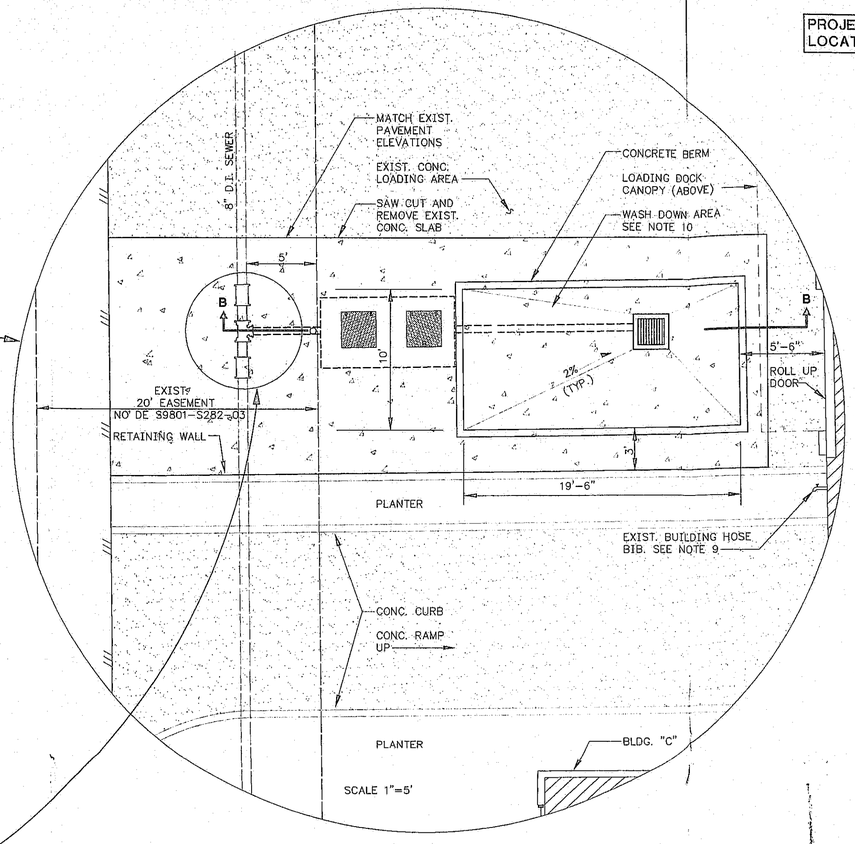
A PORTION OF SECTION 3, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M. KING COUNTY WASHINGTON

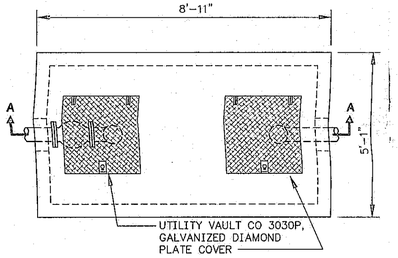
SEWER NOTES

1. WOODINVILLE WATER DISTRICT STANDARD DETAILS AND MATERIALS SPECIFICATIONS ARE HEREBY MADE PART OF THESE PLANS AS IF ATTACHED HERETO BY THIS REFERENCE.
2. MINIMUM SEPARATION OF POTABLE WATER MAINS AND SANITARY SEWER LINES SHALL BE IN ACCORDANCE WITH SECTION 2.41 OF THE CRITERIA FOR SEWAGE WORKS DESIGN, PUBLISHED BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY AS REVISED.
3. ALL SIDE SEWERS ARE TO BE INSTALLED AT 2 PERCENT MIN. SLOPE.
4. THE DEVELOPER SHALL NOTIFY THE ENGINEER AT LEAST SEVEN DAYS IN ADVANCE AND MAKE THE NECESSARY ARRANGEMENTS WITH THE WATER DISTRICT MANAGER FOR CONNECTION TO EXISTING SEWER MAINS.
5. LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE. IDENTIFICATION, LOCATION MARKING AND RESPONSIBILITY FOR UNDERGROUND FACILITIES OR UTILITIES ARE GOVERNED BY THE PROVISIONS OF CHAPTER 19.122 REVISED CODE OF WASHINGTON.
6. THE CONTRACTOR IS CAUTIONED THAT OVERHEAD ELECTRICAL SERVICE LINED ARE GENERALLY NOT SHOWN ON THE DRAWINGS. ELECTRICAL LINES IF SHOWN ON THE DRAWINGS ARE LOCATED BY POINT-TO-POINT, POWER-TO-POWER POLE CONNECTION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXTENT OF ANY HAZARD CREATED BY OVERHEAD ELECTRICAL FOWER IN ALL AREAS AND SHALL FOLLOW PROCEDURES DURING CONTRACTION AS REQUIRED BY LAW AND REGULATION.
7. CONTRACTOR SHALL INSTALL 6" CLEANOUT AT THE EDGE OF EASEMENT NO. DE S9801-S282-03 PER WOODINVILLE WATER DISTRICT STANDARD DETAIL NO. 6.
8. WOODINVILLE WATER DISTRICT WILL OWN AND MAINTAIN SIDE SEWER TO EDGE OF EASEMENT. SIDE SEWER, SEDIMENTATION BASIN AND WASH DOWN AREA BEYOND EASEMENT SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER.
9. INSTALL BACK FLOW PREVENTER ON BLDG WATER SYSTEM. OWNER SHALL FURNISH A COPY OF THE BACKFLOW CERTIFICATION TO THE WOODINVILLE WATER DISTRICT PRIOR TO SIDE SEWER CONSTRUCTION.
10. CONSTRUCT CONC. BERM TO PREVENT SURFACE RUN-OFF FROM ENTERING WASH DOWN AREA.

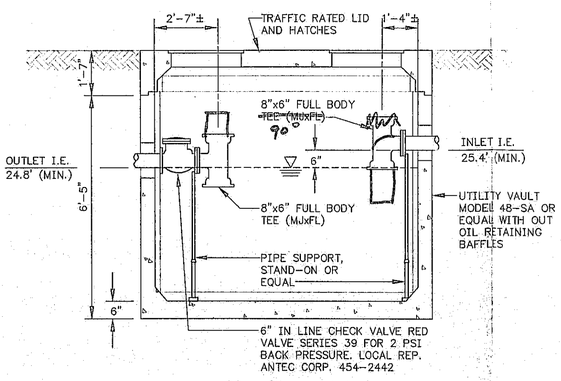


SITE PLAN
SCALE 1"=50'

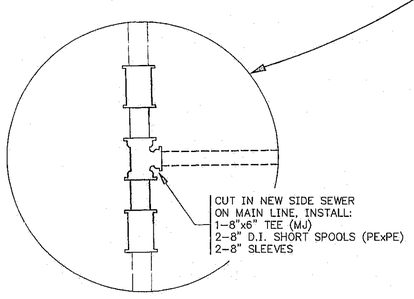


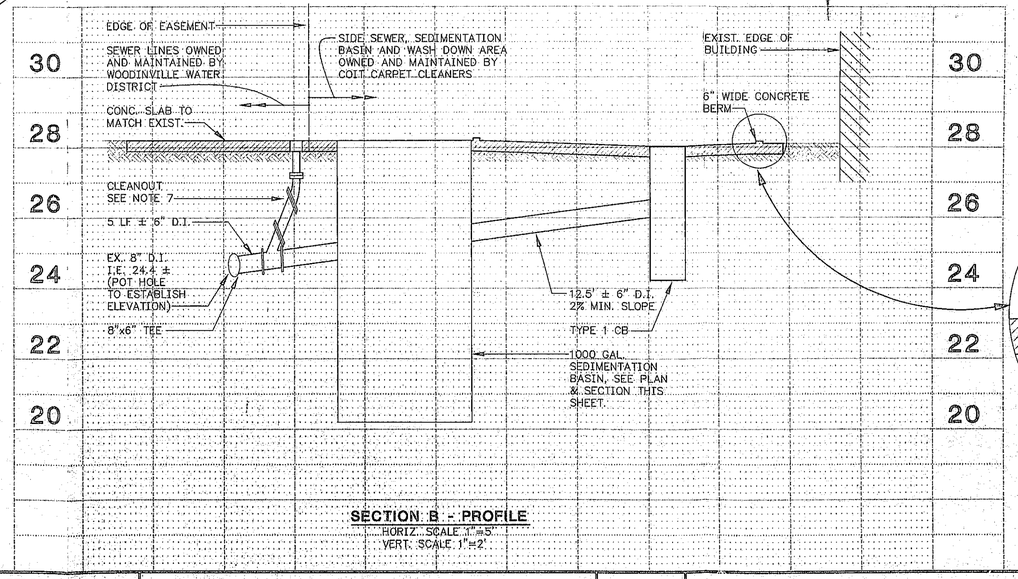


PLAN VIEW

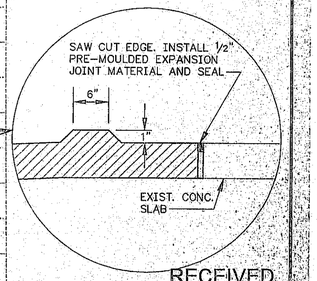


SECTION AA
SEDIMENTATION BASIN
NOT TO SCALE



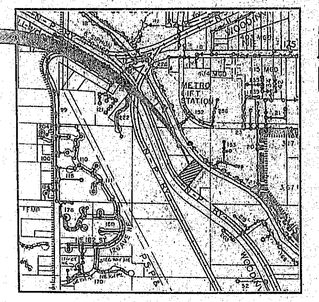


SECTION B - PROFILE
HORIZ. SCALE 1"=5'
VERT. SCALE 1"=2'



CONCRETE BERM
NOT TO SCALE

PROJECT LOCATION



VICINITY MAP
NOT TO SCALE

LEGEND

EXISTING	THIS PROJECT	DESCRIPTION
		ASPHALT
		CONCRETE
		SEWER LINE, MANHOLE AND SIDE SEWER

CALL 2 DAYS BEFORE YOU DIG 1-800-424-5555

RECEIVED
SEP 28 1999
PERMIT CENTER

No.	Date	By	Ckd.	Appr.	Revision

02902.DWG 1:20 24X36 6-1-99

EXPIRES: 1/8/01

CHS ENGINEERS INC.
12507 BEL-RED ROAD SUITE 101
BELLEVUE, WA 98005-2600
TEL (425) 637-3693 FAX (425) 637-3694

Drawn By	Date	Checked By	Date
LR	4-99	MD	5-99
Designed By	Date	Approved By	Date
CE	4-99	AS	5-99

WOODINVILLE WATER DISTRICT
APPROVED BY MANAGER, ACTING G.M.
6-21-99
DATE

Scale:
Horiz. 1"=5'
Vert. 1"=2'
Job No. 02902

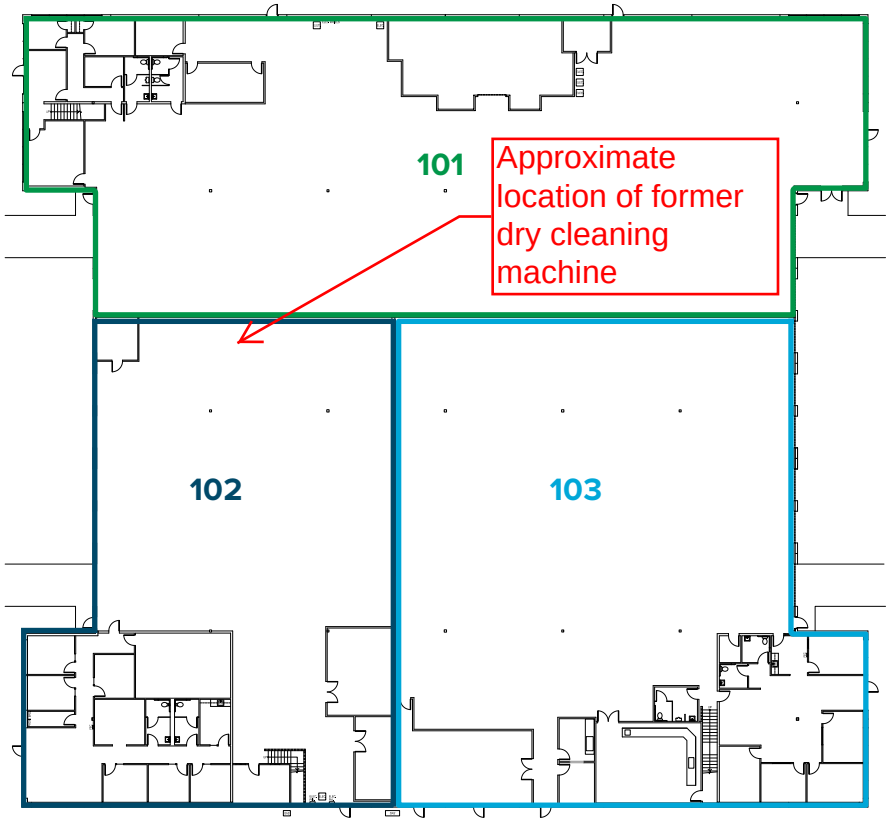
WOODINVILLE WATER DISTRICT

COIT CARPET
SIDE SEWER CONNECTION

Sheet 1 of 1
S 296

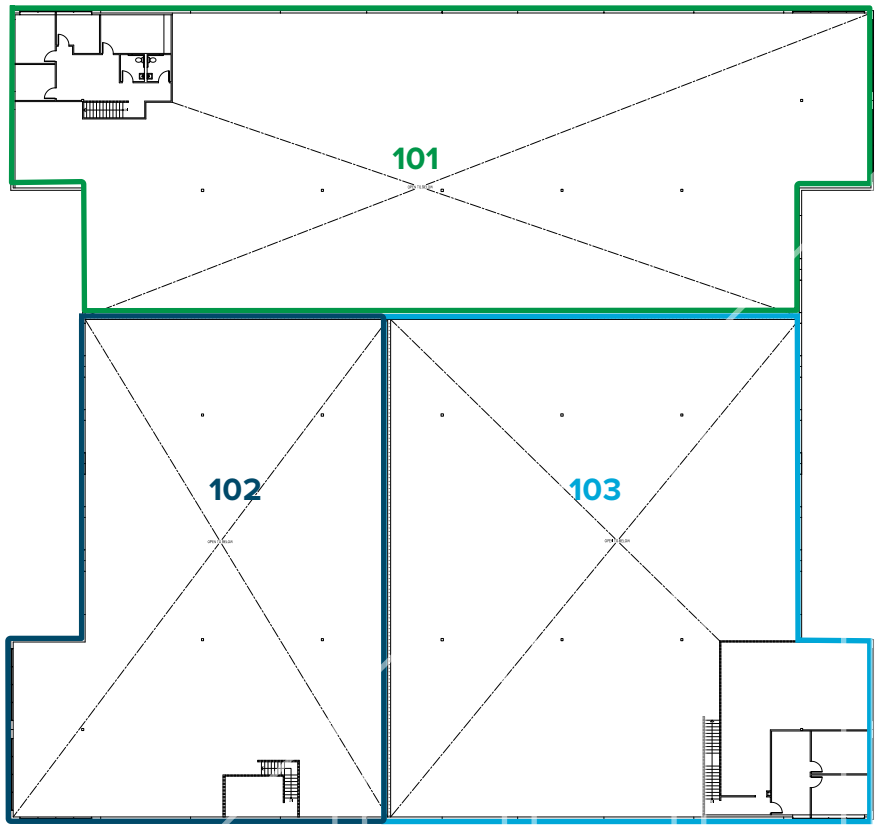
FLOOR PLANS

BUILDING C • 1ST FLOOR



101	WinCraft
102	COIT
103	Superior Cleaning

BUILDING C • 2ND FLOOR



APPENDIX B

PHOTOGRAPHS

AECOM	PHOTOGRAPHIC LOG

TA Realty	16750 Redmond-Woodinville Rd NE Woodinville, Washington	AECOM Project No.: 60618336 Date: 12/5/2019

Photo No. 1	Date: 11/16/2019

Direction Photo Taken:

North/Northeast

Description:

Locations of borings around oil/water separator (GP-1 through GP-3). Note: the initial location circled for GP-3 was moved due to the presence of loose gravel encountered during hand augering the first 5 feet.

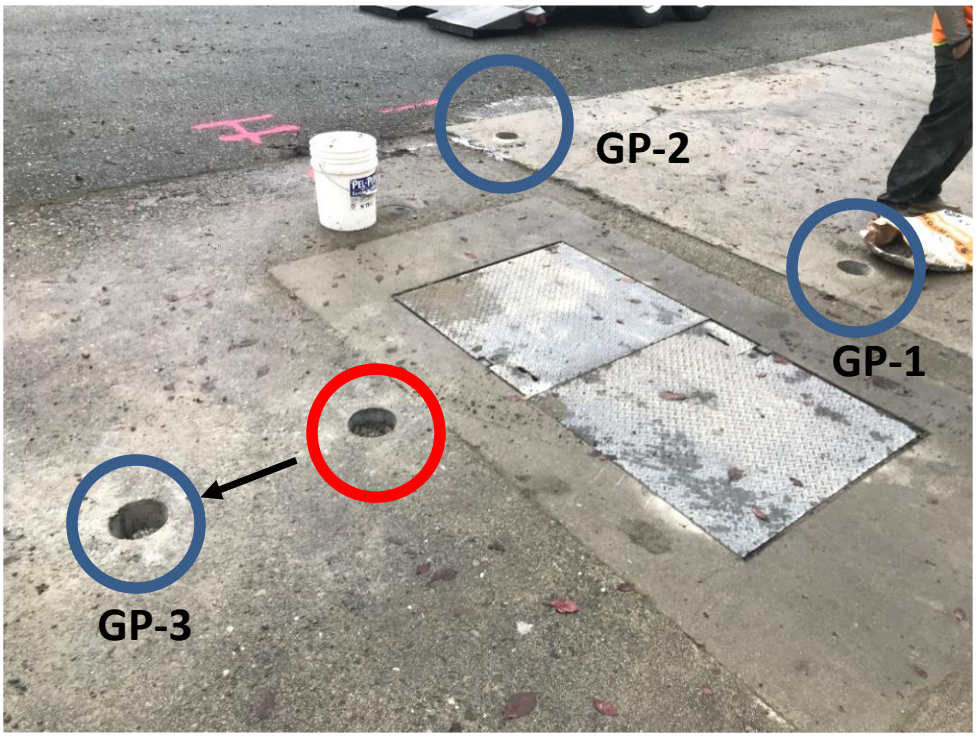


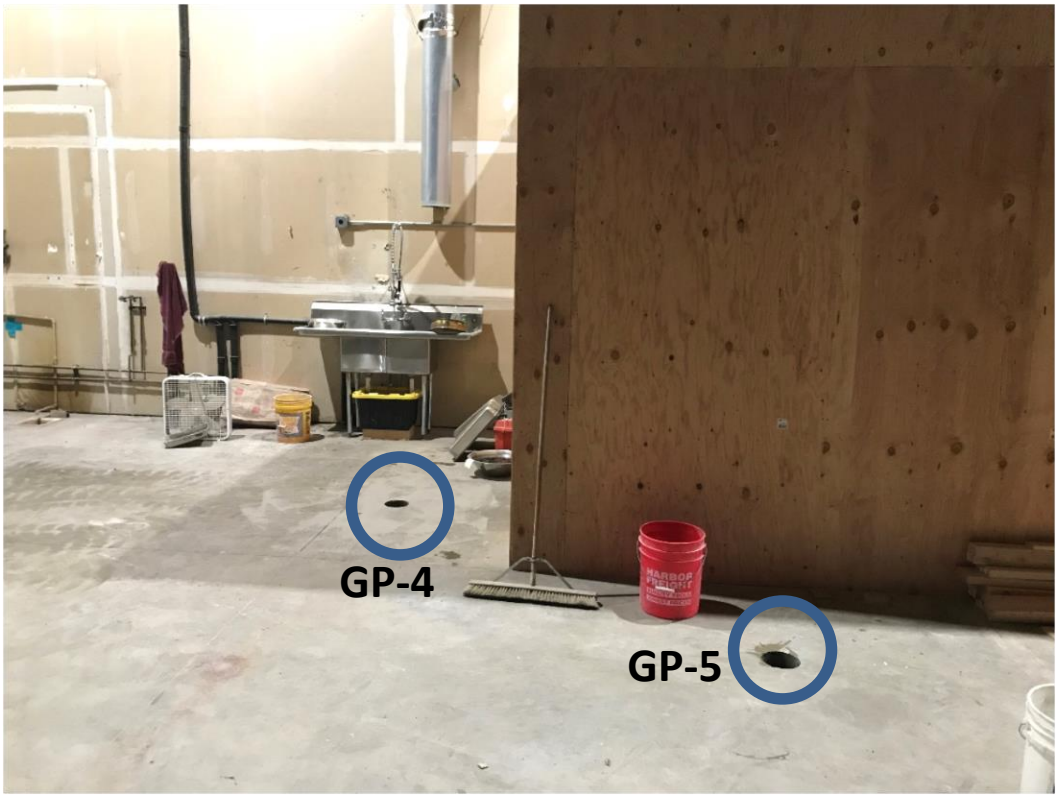
Photo No. 2	Date: 11/16/2019

Direction Photo Taken:

East

Description:

Location of borings near the former dry cleaning machine (GP-4 and GP-5).



AECOM	PHOTOGRAPHIC LOG

TA Realty	16750 Redmond-Woodinville Rd NE Woodinville, Washington	AECOM Project No.: 60618336 Date: 12/5/2019

Photo No. 3	Date: 11/16/2019

Direction Photo Taken:

n/a

Description:

Representative interbedded peat layer collected at GP-3 from 10-15 feet bgs.

Photo No. 4	Date: 11/16/2019

Direction Photo Taken:

n/a

Description:

Representative fine-medium sand layer observed in soil sample collected at GP-3 from 15-20 feet bgs.

APPENDIX C

BORING LOGS AND GROUNDWATER SAMPLING FORMS

Project: TA Realty, 16750 Redmond-Woodinville Road NE
Project Location: Woodinville, Washington
Project Number: 60618336

Log of Boring GP-1

Sheet 1 of 1

Date(s) Drilled	**11/16/2019**	Logged By	**S. Holmes**	Checked By	**D. Raubvogel**
Drilling Method	**Direct Push**	Drilling Contractor	**Cascade**	Total Depth of Borehole	**15 feet bgs**
Drill Rig Type	**GeoProbe 7822 DT**	Drill Bit Size/Type	**2.25" OD**	Ground Surface Elevation (feet MSL)	
Groundwater Level (feet bgs)	**8.5 ft bgs**	Sampling Method	**Continuous**	Hammer Data	
Borehole Backfill	**Bentonite**	Location	**OWS**		

Elevation, feet	Downhole Depth, feet	SAMPLES Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)	Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0							Concrete	Start: 0915
							SM	Brown silty fine to medium SAND, trace fine gravel (loose) (moist) (no odor, no staining) (fill)	Finish: Hand augered from 0.5-5 ft
		GP-1-3			0.0				0945
							ML	Gray SILT with trace fine sand (soft) (moist) (no odor, no staining)	
	5				1.3		SM SP	Brown silty fine to medium SAND with organics (moist) (no odor, no staining)	
					0.6			Dark gray fine to medium SAND (loose) (moist) (no odor, no staining)	
		GP-1-8			0.6				1030
		GP-1-W						8.5 ft ▼	
							PT/ML	Light gray SILT (moist) (no odor, no staining)	1105 (water sample)
	10				0.0			Grading with dark brown peat Grading dark gray-dark reddish brown SILT with PEAT (moist) (no odor, no staining)	
					0.0				
					0.0				
		GP-1-14.5					SM	Gray silty fine SAND (wet) (no odor, no staining)	1040
	15							Boring was completed to 15 ft bgs. Groundwater was encountered at 8.5 ft bgs. Boring was backfilled with bentonite.	
	20								
	25								
	30								

ENV2 W/O WELL J:\DCS\RESOURCES\GRFX\PROJECTS\60618336 16750 REDMOND-WOODINVILLE RD NE\BORING LOGS\60618336-LOGS.GPJ AECOM-SEA.GLB URSSEA3.GDT 12/16/19

AECOM

Project: TA Realty, 16750 Redmond-Woodinville Road NE
Project Location: Woodinville, Washington
Project Number: 60618336

Log of Boring GP-2

Sheet 1 of 1

Date(s) Drilled	**11/16/2019**	Logged By	**S. Holmes**	Checked By	**D. Raubvogel**
Drilling Method	**Direct Push**	Drilling Contractor	**Cascade**	Total Depth of Borehole	**20 feet bgs**
Drill Rig Type	**GeoProbe 7822 DT**	Drill Bit Size/Type	**2.25" OD**	Ground Surface Elevation (feet MSL)	
Groundwater Level (feet bgs)	**16 ft bgs**	Sampling Method	**Continuous**	Hammer Data	
Borehole Backfill	**Bentonite**	Location	**OWS**		

Elevation, feet	Downhole Depth, feet	SAMPLES Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)	Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0							Concrete	Start: 1120 Finish: 1225 Hand augered from 0.5-5 ft
							SM	Brown silty fine to medium SAND with fine gravel (loose) (moist) (no odor, no staining) (fill)	
		GP-2-4			1.5		ML	Gray SILT with trace fine sand (soft) (moist) (no odor, no staining)	1125
	5						SP	Dark gray fine to medium SAND (loose) (moist) (no odor, no staining)	
					0.0		ML	Gray SILT with fine to medium sand laminations (moist) (no odor, no staining) 3 in. peat layer at 9 ft	
		GP-2-9.5			4.9				1135
	10						SP/PT	Dark brown sandy PEAT (moist) (no odor, no staining)	
					0.0				
		GP-2-14.5			0.0				1210
	15						SP	Attempt to collect water after drilling to 15 ft, insufficient volume. Drove point to 20 ft bgs, set temporary well screen from 9-19 ft. 16 ft ▼ Dark gray clean fine to medium SAND (wet) (no odor, no staining)	
		GP-2-W							1220 (water sample)
	20							Boring was completed to 20 ft bgs. Groundwater was encountered at 16 ft bgs. Boring was backfilled with bentonite.	
	25								
	30								

ENV2 W/O WELL J:\DCS\RESOURCES\GRFX\PROJECTS\60618336 16750 REDMOND-WOODINVILLE RD NE\BORING LOGS\60618336-LOGS.GPJ AECOM-SEA.GLB URSSEA3.GDT 12/16/19

AECOM

Project: TA Realty, 16750 Redmond-Woodinville Road NE
Project Location: Woodinville, Washington
Project Number: 60618336

Log of Boring GP-3

Sheet 1 of 1

Date(s) Drilled	**11/16/2019**	Logged By	**S. Holmes**	Checked By	**D. Raubvogel**
Drilling Method	**Direct Push**	Drilling Contractor	**Cascade**	Total Depth of Borehole	**20 feet bgs**
Drill Rig Type	**GeoProbe 7822 DT**	Drill Bit Size/Type	**2.25" OD**	Ground Surface Elevation (feet MSL)	
Groundwater Level (feet bgs)	**16 ft bgs**	Sampling Method	**Continuous**	Hammer Data	
Borehole Backfill	**Bentonite**	Location	**OWS**		

Elevation, feet	Downhole Depth, feet	SAMPLES Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)	Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0							Concrete	Start: 1243 Finish: 1330 Hand augered from 0.5-5 ft
							SM	Brown silty SAND with gravel (moist) (no odor, no staining) (fill)	
					0.0				
		GP-3-3.5					ML	Gray SILT (soft) (moist) (no odor, no staining) (native fill)	1145
	5				0.1		SM	Gray-brown silty SAND with trace gravel, rootlets and organics	
							SP	Dark gray clean fine to medium SAND (loose) (moist) (no odor, no staining)	
					0.0				
							PT/ML	Gray SILT	
	10	GP-3-10.5			0.0			Grading to dark reddish-brown PEAT (moist) (no odor, no staining)	1255
					0.0				
					0.0				
	15						SP	Dark gray clean fine to medium SAND (wet) (no odor, no staining)	
								16 ft ▼	
		GP-3-17			0.0				1305
		GP-3-W							1320 (water sample)
	20				0.0			Boring was completed to 20 ft bgs. Groundwater was encountered at 16 ft bgs. Boring was backfilled with bentonite.	
	25								
	30								

AECOM

ENV2 W/O WELL J:\DCS\RESOURCES\GRFX\PROJECTS\60618336 16750 REDMOND-WOODINVILLE RD NE\BORING LOGS\60618336-LOGS.GPJ AECOM-SEA.GLB URSSEA3.GDT 12/16/19

Project: TA Realty, 16750 Redmond-Woodinville Road NE
Project Location: Woodinville, Washington
Project Number: 60618336

Log of Boring GP-4

Sheet 1 of 1

Date(s) Drilled	**11/16/2019**	Logged By	**S. Holmes**	Checked By	**D. Raubvogel**
Drilling Method	**Direct Push**	Drilling Contractor	**Cascade**	Total Depth of Borehole	**15 feet bgs**
Drill Rig Type	**GeoProbe 7822 DT**	Drill Bit Size/Type	**2.25" OD**	Ground Surface Elevation (feet MSL)	
Groundwater Level (feet bgs)	**4.6 ft bgs**	Sampling Method	**Continuous**	Hammer Data	
Borehole Backfill	**Bentonite**	Location	**Dry Cleaning Machine**		

Elevation, feet / Downhole Depth, feet	SAMPLES Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)	Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
0							Concrete	Start: 1425 Finish: 1505 Hand augered from 0.75-5 ft
						SM	Brown silty well graded SAND and fine gravel (moist) (no odor, no staining) (fill)	
5							4.6 ft ▼	
	GP-4-W							1500 (water sample)
	GP-4-7			0.0				1430
						SP	Gray fine SAND with trace silt and trace gravel (loose) (dry) (no odor, no staining)	
				0.0		ML	Brown-gray SILT (medium stiff) (moist) (no odor, no staining)	
10				0.2		SM	Gray silty fine to medium SAND (very loose) (wet) (no odor, no staining)	
	GP-4-12			0.2				1445
						PT/SM	Dark reddish brown sandy, silty PEAT (dry) (no odor, no staining)	
	GP-4-15			0.0				1455
15							Boring was completed to 15 ft bgs. Groundwater was encountered at 4.6 ft bgs. Boring was backfilled with bentonite.	
20								
25								
30								

AECOM

ENV2 W/O WELL J:\DCS\RESOURCES\GRFX\PROJECTS\60618336 16750 REDMOND-WOODINVILLE RD NE\BORING LOGS\60618336-LOGS.GPJ AECOM-SEA.GLB URSSEA3.GDT 12/16/19

Project: TA Realty, 16750 Redmond-Woodinville Road NE
Project Location: Woodinville, Washington
Project Number: 60618336

Log of Boring GP-5

Sheet 1 of 1

Date(s) Drilled	**11/16/2019**	Logged By	**S. Holmes**	Checked By	**D. Raubvogel**
Drilling Method	**Direct Push**	Drilling Contractor	**Cascade**	Total Depth of Borehole	**25 feet bgs**
Drill Rig Type	**GeoProbe 7822 DT**	Drill Bit Size/Type	**2.25" OD**	Ground Surface Elevation (feet MSL)	
Groundwater Level (feet bgs)	**15.9 ft bgs**	Sampling Method	**Continuous**	Hammer Data	
Borehole Backfill	**Bentonite**	Location	**Dry Cleaning Machine**		

Elevation, feet	Downhole Depth, feet	SAMPLES Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)	Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0							Concrete	Start: 1515 Finish: 1630 Hand augered from 0.5-5 ft
							SM	Brown silty SAND and fine gravel (dry) (no odor, no staining) (fill)	
	5	GP-5-6			0.5			Trace woody debris at 5.5 ft	1525
					0.2			Grading gray silty fine SAND (loose) (dry) (no odor, no staining)	
					0.0		ML	Gray clayey SILT (low-medium plasticity)	
	10				0.0				
		GP-5-13			0.0		SP	Brown well graded SAND with trace gravel (dry) (no odor, no staining)	1535
							PT/SM	Gray-brown sandy SILT (no odor, no staining)	
	15							Grading dark reddish brown peat	
								15.9 ft ▼	
					0.0		SP	Gray fine to medium SAND with trace peat inclusions (moist to wet) (no odor, no staining)	
		GP-5-W							1615 (water sample)
	20	GP-5-19.5			0.0				1545
								No samples, drove point to 25 ft to collect water sample	
	25							Boring was completed to 25 ft bgs. Groundwater was encountered at 15.9 ft bgs. Boring was backfilled with bentonite.	
	30								

AECOM

GROUNDWATER SAMPLING LOG

Project name 16750 Redmond–Woodinville Rd NE Phase II ESA
Project No.
Date 11/16/19

Well No. GP-1 (Temp)
Sampled By SH
weather Overcast 50 °F

WELL INFORMATION

Depth to water	8.5	(ft)
Depth of well:	9	(ft)
Well diameter:	0.75	(in)
Feet of water:	0.5	(ft)
Product thickness:	—	(ft)
Screen interval:	5–9' bgs	
well condition:		

COMMENTS

Med-low turbidity

PURGE DATA

start purge time	1055								
time		1055	1105						
DTW	(ft)	8.5	" "						
purge rate	(L/min)	~200	" "						
pH	(Units)								
conductivity	(umhos/cm)								
temperature	(deg C)								
D.O.	(mg/L)								
ORP	(mv)								
turbidity	(NTU)	High	Med-low						
purge and sample equip.		Peri Pump, LDPE tubing							

SAMPLE INFORMATION

sample number	time	analysis	container	# bottles	preservative
GP-1-W	1105	cVOCs	40 mL VOA	3	HCl

AECOM

GROUNDWATER SAMPLING LOG

Project name 16750 Redmond-Woodinville Rd NE
Project No. Phase II ESA
Date 11/16/19

Well No. GP-2 (temp)
Sampled By SH
weather Overcast 50 °F

WELL INFORMATION		
Depth to water	16	(ft)
Depth of well:	19	(ft)
Well diameter:	0.75	(in)
Feet of water:	3	(ft)
Product thickness:	—	(ft)
Screen interval:	9-19' bgs	
well condition:		

COMMENTS

PURGE DATA									
start purge time	1210								
time		1210	1220						
DTW	(ft)	16	" "						
purge rate	(L/min)	~200	" "						
pH	(Units)	—							
conductivity	(umhos/cm)	—							
temperature	(deg C)	—							
D.O.	(mg/L)	—							
ORP	(mv)	—							
turbidity	(NTU)	High	Med-low						
purge and sample equip.		Peri pump, LDPE Tubing							

SAMPLE INFORMATION					
sample number	time	analysis	container	# bottles	preservative
GP-2-W	1220	CVOCs	40 mL VOA	3	HCl

AECOM

GROUNDWATER SAMPLING LOG

Project name 16750 Redmond-Woodinville Rd NE Phase II ESA
Project No.
Date 11/16/19

Well No. GP-3 (temp)
Sampled By SH
weather Overcast, ~50 °F

WELL INFORMATION

Depth to water	16	(ft)
Depth of well:	19	(ft)
Well diameter:	0.75	(in)
Feet of water:	3	(ft)
Product thickness:	—	(ft)
Screen interval:	9-19'	
well condition:	—	

COMMENTS

PURGE DATA

start purge time	1305							
time		1305	1315	1320				
DTW	(ft)	16	" "	" "				
purge rate	(L/min)	~200	" "	" "				
pH	(Units)							
conductivity	(umhos/cm)							
temperature	(deg C)							
D.O.	(mg/L)							
ORP	(mv)							
turbidity	(NTU)	High	Med	Med.				
purge and sample equip.		Peri Pump, LDPE Tubing						

SAMPLE INFORMATION

sample number	time	analysis	container	# bottles	preservative
GP-3-W	1320	CVOCs	40 mL VOA	3	HCl

AECOM

GROUNDWATER SAMPLING LOG

Project name 16750 Redmond-Woodinville Rd NE
Project No. Phase II ESA
Date 11/16/19

Well No. GP-4 (temp)
Sampled By SH
weather Rain 50 °F

WELL INFORMATION

Depth to water	4.6	(ft)
Depth of well:	14	(ft)
Well diameter:	0.75	(in)
Feet of water:	9.4	(ft)
Product thickness:	—	(ft)
Screen interval:	4-14'	
well condition:		

COMMENTS

Add. volume collected for lab QC samples

PURGE DATA

start purge time	1450								
time		1450	1500						
DTW	(ft)	4.6	" "						
purge rate	(L/min)	~200	" "						
pH	(Units)								
conductivity	(umhos/cm)								
temperature	(deg C)								
D.O.	(mg/L)								
ORP	(mv)								
turbidity	(NTU)	Med	Med-low						
purge and sample equip.		Peri Pump, LDPE Tubing							

SAMPLE INFORMATION

sample number	time	analysis	container	# bottles	preservative
GP-4-W	1500	VOCs	40 mL VOA	6	HCl

AECOM

GROUNDWATER SAMPLING LOG

Project name 1750 Redmond-Woodinville Rd NE
Project No. Phase II ESA
Date 11/16/19

Well No. GP-5 (temp)
Sampled By SH
weather Rain 50°F

WELL INFORMATION		
Depth to water	15.9	(ft)
Depth of well:	24	(ft)
Well diameter:	0.75	(in)
Feet of water:	8.1	(ft)
Product thickness:		(ft)
Screen interval:	14-24' bgs	
well condition:		

COMMENTS

PURGE DATA								
start purge time	1600							
time		1600	1610	1615				
DTW	(ft)	15.9	" "	" "				
purge rate	(L/min)	~200	" "	" "				
pH	(Units)	|	|	|				
conductivity	(umhos/cm)	|	|	|				
temperature	(deg C)	|	|	|				
D.O.	(mg/L)	|	|	|				
ORP	(mv)	|	|	|				
turbidity	(NTU)	High	Med	Med				
purge and sample equip.		Peri Pump, LDPE Tubing						

SAMPLE INFORMATION					
sample number	time	analysis	container	# bottles	preservative
GP-5-W	1615	cVOCs	40 mL VOA	3	HCl

APPENDIX D

LABORATORY ANALYTICAL REPORTS

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

AECOM
David Raubvogel
1111 3rd Avenue Suite 1600
Seattle, WA 98101

RE: Building C Phase II ESA
Work Order Number: 1911240

November 25, 2019

Attention David Raubvogel:

Fremont Analytical, Inc. received 22 sample(s) on 11/18/2019 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *11/25/2019*

CLIENT: AECOM
Project: Building C Phase II ESA
Work Order: 1911240

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1911240-001	GP-1-3	11/16/2019 9:45 AM	11/18/2019 12:43 PM
1911240-002	GP-1-8	11/16/2019 10:30 AM	11/18/2019 12:43 PM
1911240-003	GP-1-14.5	11/16/2019 10:40 AM	11/18/2019 12:43 PM
1911240-004	GP-2-4	11/16/2019 11:25 AM	11/18/2019 12:43 PM
1911240-005	GP-2-9.5	11/16/2019 11:35 AM	11/18/2019 12:43 PM
1911240-006	GP-2-14.5	11/16/2019 12:10 PM	11/18/2019 12:43 PM
1911240-007	GP-3-3.5	11/16/2019 11:45 AM	11/18/2019 12:43 PM
1911240-008	GP-3-10.5	11/16/2019 12:55 PM	11/18/2019 12:43 PM
1911240-009	GP-3-17	11/16/2019 1:05 PM	11/18/2019 12:43 PM
1911240-010	GP-4-7	11/16/2019 2:30 PM	11/18/2019 12:43 PM
1911240-011	GP-4-12	11/16/2019 2:45 PM	11/18/2019 12:43 PM
1911240-012	GP-4-15	11/16/2019 2:55 PM	11/18/2019 12:43 PM
1911240-013	GP-5-6	11/16/2019 3:25 PM	11/18/2019 12:43 PM
1911240-014	GP-5-13	11/16/2019 3:35 PM	11/18/2019 12:43 PM
1911240-015	GP-5-19.5	11/16/2019 3:45 PM	11/18/2019 12:43 PM
1911240-016	GP-1-W	11/16/2019 11:05 AM	11/18/2019 12:43 PM
1911240-017	GP-2-W	11/16/2019 12:20 PM	11/18/2019 12:43 PM
1911240-018	GP-3-W	11/16/2019 1:20 PM	11/18/2019 12:43 PM
1911240-019	GP-4-W	11/16/2019 3:00 PM	11/18/2019 12:43 PM
1911240-020	GP-5-W	11/16/2019 4:15 PM	11/18/2019 12:43 PM
1911240-021	Trip Blank	11/13/2019 8:51 AM	11/18/2019 12:43 PM
1911240-022	Trip Blank	11/13/2019 8:51 AM	11/18/2019 12:43 PM

Case Narrative

WO#: **1911240**
Date: **11/25/2019**

CLIENT: AECOM
Project: Building C Phase II ESA

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: AECOM
Collection Date: 11/16/2019 9:45:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-001
Matrix: Soil
Client Sample ID: GP-1-3

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Chloromethane	ND	0.0412		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Vinyl chloride	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Trichlorofluoromethane (CFC-11)	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Chloroethane	ND	0.0412		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1-Dichloroethene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Methylene chloride	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
trans-1,2-Dichloroethene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1-Dichloroethane	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
cis-1,2-Dichloroethene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Chloroform	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1-Dichloropropene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2-Dichloroethane (EDC)	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Trichloroethene (TCE)	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2-Dichloropropane	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Bromodichloromethane	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
cis-1,3-Dichloropropene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
trans-1,3-Dichloropropylene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1,2-Trichloroethane	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,3-Dichloropropane	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Tetrachloroethene (PCE)	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,1,2,2-Tetrachloroethane	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
2-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2,3-Trichloropropane	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2,4-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,3-Dichlorobenzene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,4-Dichlorobenzene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2-Dichlorobenzene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2-Dibromo-3-chloropropane	ND	0.412		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Hexachloro-1,3-butadiene	ND	0.0412		mg/Kg-dry	1	11/21/2019 11:55:01 AM
1,2,3-Trichlorobenzene	ND	0.0165		mg/Kg-dry	1	11/21/2019 11:55:01 AM
Surr: Dibromofluoromethane	102	78.3 - 116		%Rec	1	11/21/2019 11:55:01 AM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 11:55:01 AM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 9:45:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-001
Matrix: Soil
Client Sample ID: GP-1-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	91.5	81.9 - 115		%Rec	1	11/21/2019 11:55:01 AM
Sample Moisture (Percent Moisture)				Batch ID: R55463		Analyst: CG
Percent Moisture	10.4	0.500		wt%	1	11/21/2019 8:39:10 AM

Client: AECOM
Collection Date: 11/16/2019 10:30:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-002
Matrix: Soil
Client Sample ID: GP-1-8

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Chloromethane	ND	0.0612		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Vinyl chloride	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Trichlorofluoromethane (CFC-11)	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Chloroethane	ND	0.0612		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1-Dichloroethene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Methylene chloride	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
trans-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1-Dichloroethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
cis-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Chloroform	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1,1-Trichloroethane (TCA)	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1-Dichloropropene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Carbon tetrachloride	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2-Dichloroethane (EDC)	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Trichloroethene (TCE)	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2-Dichloropropane	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Bromodichloromethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
cis-1,3-Dichloropropene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
trans-1,3-Dichloropropylene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1,2-Trichloroethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,3-Dichloropropane	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Tetrachloroethene (PCE)	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Dibromochloromethane	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Chlorobenzene	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1,1,2-Tetrachloroethane	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,1,2,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
2-Chlorotoluene	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
4-Chlorotoluene	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2,3-Trichloropropane	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2,4-Trichlorobenzene	ND	0.0306		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,3-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,4-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2-Dibromo-3-chloropropane	ND	0.612		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Hexachloro-1,3-butadiene	ND	0.0612		mg/Kg-dry	1	11/21/2019 12:55:55 PM
1,2,3-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 12:55:55 PM
Surr: Dibromofluoromethane	100	78.3 - 116		%Rec	1	11/21/2019 12:55:55 PM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 12:55:55 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 10:30:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-002
Matrix: Soil
Client Sample ID: GP-1-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	90.6	81.9 - 115		%Rec	1	11/21/2019 12:55:55 PM
Sample Moisture (Percent Moisture)				Batch ID: R55463		Analyst: CG
Percent Moisture	20.5	0.500		wt%	1	11/21/2019 8:39:10 AM

Client: AECOM
Collection Date: 11/16/2019 11:25:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-004
Matrix: Soil
Client Sample ID: GP-2-4

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Chloromethane	ND	0.0600		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Vinyl chloride	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Trichlorofluoromethane (CFC-11)	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Chloroethane	ND	0.0600		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1-Dichloroethene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Chloroform	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1,1-Trichloroethane (TCA)	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Carbon tetrachloride	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
cis-1,3-Dichloropropene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,3-Dichloropropane	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Tetrachloroethene (PCE)	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Dibromochloromethane	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Chlorobenzene	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1,1,2-Tetrachloroethane	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
4-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2,4-Trichlorobenzene	ND	0.0300		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,3-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,4-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2-Dibromo-3-chloropropane	ND	0.600		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Hexachloro-1,3-butadiene	ND	0.0600		mg/Kg-dry	1	11/21/2019 1:26:22 PM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/21/2019 1:26:22 PM
Surr: Dibromofluoromethane	101	78.3 - 116		%Rec	1	11/21/2019 1:26:22 PM
Surr: Toluene-d8	100	84.2 - 114		%Rec	1	11/21/2019 1:26:22 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 11:25:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-004
Matrix: Soil
Client Sample ID: GP-2-4

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	91.5	81.9 - 115		%Rec	1	11/21/2019 1:26:22 PM
Sample Moisture (Percent Moisture)				Batch ID: R55463		Analyst: CG
Percent Moisture	17.3	0.500		wt%	1	11/21/2019 8:39:10 AM

Client: AECOM
Collection Date: 11/16/2019 11:35:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-005
Matrix: Soil
Client Sample ID: GP-2-9.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Chloromethane	ND	0.110		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Vinyl chloride	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Trichlorofluoromethane (CFC-11)	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Chloroethane	ND	0.110		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1-Dichloroethene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Methylene chloride	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
trans-1,2-Dichloroethene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1-Dichloroethane	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
cis-1,2-Dichloroethene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Chloroform	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1,1-Trichloroethane (TCA)	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1-Dichloropropene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Carbon tetrachloride	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2-Dichloroethane (EDC)	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Trichloroethene (TCE)	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2-Dichloropropane	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Bromodichloromethane	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
cis-1,3-Dichloropropene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
trans-1,3-Dichloropropylene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1,2-Trichloroethane	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,3-Dichloropropane	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Tetrachloroethene (PCE)	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Dibromochloromethane	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Chlorobenzene	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1,1,2-Tetrachloroethane	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,1,2,2-Tetrachloroethane	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
2-Chlorotoluene	0.123	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
4-Chlorotoluene	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2,3-Trichloropropane	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2,4-Trichlorobenzene	ND	0.0548		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,3-Dichlorobenzene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,4-Dichlorobenzene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2-Dichlorobenzene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2-Dibromo-3-chloropropane	ND	1.10		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Hexachloro-1,3-butadiene	ND	0.110		mg/Kg-dry	1	11/21/2019 1:56:44 PM
1,2,3-Trichlorobenzene	ND	0.0438		mg/Kg-dry	1	11/21/2019 1:56:44 PM
Surr: Dibromofluoromethane	99.2	78.3 - 116		%Rec	1	11/21/2019 1:56:44 PM
Surr: Toluene-d8	100	84.2 - 114		%Rec	1	11/21/2019 1:56:44 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 11:35:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-005
Matrix: Soil
Client Sample ID: GP-2-9.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	91.5	81.9 - 115		%Rec	1	11/21/2019 1:56:44 PM
Sample Moisture (Percent Moisture)				Batch ID: R55463		Analyst: CG
Percent Moisture	31.6	0.500		wt%	1	11/21/2019 8:39:10 AM

Client: AECOM
Collection Date: 11/16/2019 11:45:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-007
Matrix: Soil
Client Sample ID: GP-3-3.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Chloromethane	ND	0.0512		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Vinyl chloride	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Trichlorofluoromethane (CFC-11)	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Chloroethane	ND	0.0512		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1-Dichloroethene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Methylene chloride	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
trans-1,2-Dichloroethene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1-Dichloroethane	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
cis-1,2-Dichloroethene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Chloroform	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1,1-Trichloroethane (TCA)	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1-Dichloropropene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Carbon tetrachloride	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2-Dichloroethane (EDC)	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Trichloroethene (TCE)	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2-Dichloropropane	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Bromodichloromethane	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
cis-1,3-Dichloropropene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
trans-1,3-Dichloropropylene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1,2-Trichloroethane	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,3-Dichloropropane	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Tetrachloroethene (PCE)	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Dibromochloromethane	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Chlorobenzene	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1,1,2-Tetrachloroethane	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,1,2,2-Tetrachloroethane	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
2-Chlorotoluene	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
4-Chlorotoluene	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2,3-Trichloropropane	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2,4-Trichlorobenzene	ND	0.0256		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,3-Dichlorobenzene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,4-Dichlorobenzene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2-Dichlorobenzene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2-Dibromo-3-chloropropane	ND	0.512		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Hexachloro-1,3-butadiene	ND	0.0512		mg/Kg-dry	1	11/21/2019 2:27:01 PM
1,2,3-Trichlorobenzene	ND	0.0205		mg/Kg-dry	1	11/21/2019 2:27:01 PM
Surr: Dibromofluoromethane	101	78.3 - 116		%Rec	1	11/21/2019 2:27:01 PM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 2:27:01 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 11:45:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-007
Matrix: Soil
Client Sample ID: GP-3-3.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	91.0	81.9 - 115		%Rec	1	11/21/2019 2:27:01 PM
Sample Moisture (Percent Moisture)				Batch ID: R55463		Analyst: CG
Percent Moisture	15.6	0.500		wt%	1	11/21/2019 8:39:10 AM

Client: AECOM
Collection Date: 11/16/2019 12:55:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-008
Matrix: Soil
Client Sample ID: **GP-3-10.5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Chloromethane	ND	0.0558		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Vinyl chloride	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Trichlorofluoromethane (CFC-11)	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Chloroethane	ND	0.0558		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1-Dichloroethene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Methylene chloride	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
trans-1,2-Dichloroethene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1-Dichloroethane	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
cis-1,2-Dichloroethene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Chloroform	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1,1-Trichloroethane (TCA)	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1-Dichloropropene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Carbon tetrachloride	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2-Dichloroethane (EDC)	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Trichloroethene (TCE)	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2-Dichloropropane	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Bromodichloromethane	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
cis-1,3-Dichloropropene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
trans-1,3-Dichloropropylene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1,2-Trichloroethane	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,3-Dichloropropane	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Tetrachloroethene (PCE)	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Dibromochloromethane	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Chlorobenzene	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1,1,2-Tetrachloroethane	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,1,2,2-Tetrachloroethane	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
2-Chlorotoluene	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
4-Chlorotoluene	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2,3-Trichloropropane	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2,4-Trichlorobenzene	ND	0.0279		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,3-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,4-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2-Dibromo-3-chloropropane	ND	0.558		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Hexachloro-1,3-butadiene	ND	0.0558		mg/Kg-dry	1	11/21/2019 2:57:23 PM
1,2,3-Trichlorobenzene	ND	0.0223		mg/Kg-dry	1	11/21/2019 2:57:23 PM
Surr: Dibromofluoromethane	101	78.3 - 116		%Rec	1	11/21/2019 2:57:23 PM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 2:57:23 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 12:55:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-008
Matrix: Soil
Client Sample ID: GP-3-10.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	97.0	81.9 - 115		%Rec	1	11/21/2019 2:57:23 PM
Sample Moisture (Percent Moisture)				Batch ID: R55463		Analyst: CG
Percent Moisture	23.5	0.500		wt%	1	11/21/2019 8:39:10 AM

Client: AECOM
Collection Date: 11/16/2019 2:30:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-010
Matrix: Soil
Client Sample ID: GP-4-7

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Chloromethane	ND	0.0566		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Vinyl chloride	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Trichlorofluoromethane (CFC-11)	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Chloroethane	ND	0.0566		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1-Dichloroethene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Methylene chloride	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
trans-1,2-Dichloroethene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1-Dichloroethane	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
cis-1,2-Dichloroethene	0.0381	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Chloroform	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1,1-Trichloroethane (TCA)	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1-Dichloropropene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Carbon tetrachloride	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2-Dichloroethane (EDC)	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Trichloroethene (TCE)	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2-Dichloropropane	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Bromodichloromethane	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
cis-1,3-Dichloropropene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
trans-1,3-Dichloropropylene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1,2-Trichloroethane	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,3-Dichloropropane	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Tetrachloroethene (PCE)	0.0922	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Dibromochloromethane	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Chlorobenzene	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1,1,2-Tetrachloroethane	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,1,2,2-Tetrachloroethane	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
2-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
4-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2,3-Trichloropropane	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2,4-Trichlorobenzene	ND	0.0283		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,3-Dichlorobenzene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,4-Dichlorobenzene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2-Dichlorobenzene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2-Dibromo-3-chloropropane	ND	0.566		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Hexachloro-1,3-butadiene	ND	0.0566		mg/Kg-dry	1	11/21/2019 3:27:49 PM
1,2,3-Trichlorobenzene	ND	0.0227		mg/Kg-dry	1	11/21/2019 3:27:49 PM
Surr: Dibromofluoromethane	100	78.3 - 116		%Rec	1	11/21/2019 3:27:49 PM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 3:27:49 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 2:30:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-010
Matrix: Soil
Client Sample ID: GP-4-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	97.5	81.9 - 115		%Rec	1	11/21/2019 3:27:49 PM
Sample Moisture (Percent Moisture)				Batch ID: R55486		Analyst: SBM
Percent Moisture	12.2	0.500		wt%	1	11/21/2019 3:22:51 PM

Client: AECOM
Collection Date: 11/16/2019 2:45:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-011
Matrix: Soil
Client Sample ID: GP-4-12

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Chloromethane	ND	0.0640		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Vinyl chloride	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Trichlorofluoromethane (CFC-11)	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Chloroethane	ND	0.0640		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1-Dichloroethene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Methylene chloride	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
trans-1,2-Dichloroethene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1-Dichloroethane	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
cis-1,2-Dichloroethene	0.229	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Chloroform	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1,1-Trichloroethane (TCA)	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1-Dichloropropene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Carbon tetrachloride	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2-Dichloroethane (EDC)	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Trichloroethene (TCE)	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2-Dichloropropane	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Bromodichloromethane	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
cis-1,3-Dichloropropene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
trans-1,3-Dichloropropylene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1,2-Trichloroethane	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,3-Dichloropropane	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Tetrachloroethene (PCE)	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Dibromochloromethane	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Chlorobenzene	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1,1,2-Tetrachloroethane	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,1,2,2-Tetrachloroethane	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
2-Chlorotoluene	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
4-Chlorotoluene	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2,3-Trichloropropane	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2,4-Trichlorobenzene	ND	0.0320		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,3-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,4-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2-Dibromo-3-chloropropane	ND	0.640		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Hexachloro-1,3-butadiene	ND	0.0640		mg/Kg-dry	1	11/21/2019 3:58:07 PM
1,2,3-Trichlorobenzene	ND	0.0256		mg/Kg-dry	1	11/21/2019 3:58:07 PM
Surr: Dibromofluoromethane	101	78.3 - 116		%Rec	1	11/21/2019 3:58:07 PM
Surr: Toluene-d8	100	84.2 - 114		%Rec	1	11/21/2019 3:58:07 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 2:45:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-011
Matrix: Soil
Client Sample ID: **GP-4-12**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	98.0	81.9 - 115		%Rec	1	11/21/2019 3:58:07 PM
Sample Moisture (Percent Moisture)				Batch ID: R55486		Analyst: SBM
Percent Moisture	13.1	0.500		wt%	1	11/21/2019 3:22:51 PM

Client: AECOM
Collection Date: 11/16/2019 3:25:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-013
Matrix: Soil
Client Sample ID: GP-5-6

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Chloromethane	ND	0.0629		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Vinyl chloride	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Trichlorofluoromethane (CFC-11)	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Chloroethane	ND	0.0629		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1-Dichloroethene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Methylene chloride	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
trans-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1-Dichloroethane	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
cis-1,2-Dichloroethene	0.128	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Chloroform	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1,1-Trichloroethane (TCA)	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1-Dichloropropene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Carbon tetrachloride	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2-Dichloroethane (EDC)	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Trichloroethene (TCE)	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2-Dichloropropane	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Bromodichloromethane	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
cis-1,3-Dichloropropene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
trans-1,3-Dichloropropylene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1,2-Trichloroethane	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,3-Dichloropropane	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Tetrachloroethene (PCE)	0.131	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Dibromochloromethane	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Chlorobenzene	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1,1,2-Tetrachloroethane	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,1,2,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
2-Chlorotoluene	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
4-Chlorotoluene	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2,3-Trichloropropane	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2,4-Trichlorobenzene	ND	0.0315		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,3-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,4-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2-Dibromo-3-chloropropane	ND	0.629		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Hexachloro-1,3-butadiene	ND	0.0629		mg/Kg-dry	1	11/21/2019 4:28:29 PM
1,2,3-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	11/21/2019 4:28:29 PM
Surr: Dibromofluoromethane	101	78.3 - 116		%Rec	1	11/21/2019 4:28:29 PM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 4:28:29 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 3:25:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-013
Matrix: Soil
Client Sample ID: GP-5-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	97.4	81.9 - 115		%Rec	1	11/21/2019 4:28:29 PM
Sample Moisture (Percent Moisture)				Batch ID: R55486		Analyst: SBM
Percent Moisture	17.1	0.500		wt%	1	11/21/2019 3:22:51 PM

Client: AECOM
Collection Date: 11/16/2019 3:35:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-014
Matrix: Soil
Client Sample ID: GP-5-13

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26580 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Chloromethane	ND	0.0613		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Vinyl chloride	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Trichlorofluoromethane (CFC-11)	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Chloroethane	ND	0.0613		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1-Dichloroethene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Methylene chloride	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
trans-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1-Dichloroethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
cis-1,2-Dichloroethene	0.130	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Chloroform	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1,1-Trichloroethane (TCA)	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1-Dichloropropene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Carbon tetrachloride	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2-Dichloroethane (EDC)	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Trichloroethene (TCE)	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2-Dichloropropane	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Bromodichloromethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
cis-1,3-Dichloropropene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
trans-1,3-Dichloropropylene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1,2-Trichloroethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,3-Dichloropropane	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Tetrachloroethene (PCE)	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Dibromochloromethane	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Chlorobenzene	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1,1,2-Tetrachloroethane	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,1,2,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
2-Chlorotoluene	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
4-Chlorotoluene	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2,3-Trichloropropane	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2,4-Trichlorobenzene	ND	0.0306		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,3-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,4-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2-Dibromo-3-chloropropane	ND	0.613		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Hexachloro-1,3-butadiene	ND	0.0613		mg/Kg-dry	1	11/21/2019 4:58:45 PM
1,2,3-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	11/21/2019 4:58:45 PM
Surr: Dibromofluoromethane	100	78.3 - 116		%Rec	1	11/21/2019 4:58:45 PM
Surr: Toluene-d8	101	84.2 - 114		%Rec	1	11/21/2019 4:58:45 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 3:35:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-014
Matrix: Soil
Client Sample ID: GP-5-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26580		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	96.1	81.9 - 115		%Rec	1	11/21/2019 4:58:45 PM
Sample Moisture (Percent Moisture)				Batch ID: R55486		Analyst: SBM
Percent Moisture	14.2	0.500		wt%	1	11/21/2019 3:22:51 PM

Client: AECOM
Collection Date: 11/16/2019 11:05:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-016
Matrix: Groundwater
Client Sample ID: GP-1-W

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26564 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Chloromethane	ND	2.00		µg/L	1	11/21/2019 1:28:30 AM
Vinyl chloride	ND	0.200		µg/L	1	11/21/2019 1:28:30 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Chloroethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Methylene chloride	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
cis-1,2-Dichloroethene	2.05	1.00		µg/L	1	11/21/2019 1:28:30 AM
Chloroform	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/21/2019 1:28:30 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Bromodichloromethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Chlorobenzene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
2-Chlorotoluene	4.81	1.00		µg/L	1	11/21/2019 1:28:30 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/21/2019 1:28:30 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/21/2019 1:28:30 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	11/21/2019 1:28:30 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/21/2019 1:28:30 AM
Surr: Dibromofluoromethane	99.1	45.4 - 152		%Rec	1	11/21/2019 1:28:30 AM
Surr: Toluene-d8	96.5	40.1 - 139		%Rec	1	11/21/2019 1:28:30 AM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 11:05:00 AM
Project: Building C Phase II ESA
Lab ID: 1911240-016
Matrix: Groundwater
Client Sample ID: GP-1-W

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26564		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	104	64.2 - 128		%Rec	1	11/21/2019 1:28:30 AM

Client: AECOM
Collection Date: 11/16/2019 12:20:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-017
Matrix: Groundwater
Client Sample ID: GP-2-W

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26564 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Chloromethane	ND	2.00		µg/L	1	11/20/2019 11:27:55 PM
Vinyl chloride	ND	0.200		µg/L	1	11/20/2019 11:27:55 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Chloroethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Methylene chloride	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Chloroform	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/20/2019 11:27:55 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Bromodichloromethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Chlorobenzene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/20/2019 11:27:55 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/20/2019 11:27:55 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	11/20/2019 11:27:55 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/20/2019 11:27:55 PM
Surr: Dibromofluoromethane	94.3	45.4 - 152		%Rec	1	11/20/2019 11:27:55 PM
Surr: Toluene-d8	97.8	40.1 - 139		%Rec	1	11/20/2019 11:27:55 PM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 12:20:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-017
Matrix: Groundwater
Client Sample ID: GP-2-W

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26564		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	96.8	64.2 - 128		%Rec	1	11/20/2019 11:27:55 PM

Client: AECOM
Collection Date: 11/16/2019 1:20:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-018
Matrix: Groundwater
Client Sample ID: GP-3-W

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26564 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Chloromethane	ND	2.00		µg/L	1	11/21/2019 12:28:14 AM
Vinyl chloride	0.351	0.200		µg/L	1	11/21/2019 12:28:14 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Chloroethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Methylene chloride	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Chloroform	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/21/2019 12:28:14 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Bromodichloromethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Chlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
2-Chlorotoluene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/21/2019 12:28:14 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/21/2019 12:28:14 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	11/21/2019 12:28:14 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/21/2019 12:28:14 AM
Surr: Dibromofluoromethane	94.6	45.4 - 152		%Rec	1	11/21/2019 12:28:14 AM
Surr: Toluene-d8	97.9	40.1 - 139		%Rec	1	11/21/2019 12:28:14 AM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 1:20:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-018
Matrix: Groundwater
Client Sample ID: **GP-3-W**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26564		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	97.2	64.2 - 128		%Rec	1	11/21/2019 12:28:14 AM

Client: AECOM
Collection Date: 11/16/2019 3:00:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-019
Matrix: Groundwater
Client Sample ID: GP-4-W

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26564 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Chloromethane	ND	2.00		µg/L	1	11/21/2019 12:58:22 AM
Vinyl chloride	5.45	0.200		µg/L	1	11/21/2019 12:58:22 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Chloroethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Methylene chloride	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
cis-1,2-Dichloroethene	7.62	1.00		µg/L	1	11/21/2019 12:58:22 AM
Chloroform	2.95	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/21/2019 12:58:22 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Bromodichloromethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Tetrachloroethene (PCE)	1.04	1.00		µg/L	1	11/21/2019 12:58:22 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Chlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
2-Chlorotoluene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/21/2019 12:58:22 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/21/2019 12:58:22 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	11/21/2019 12:58:22 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/21/2019 12:58:22 AM
Surr: Dibromofluoromethane	94.3	45.4 - 152		%Rec	1	11/21/2019 12:58:22 AM
Surr: Toluene-d8	96.9	40.1 - 139		%Rec	1	11/21/2019 12:58:22 AM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 3:00:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-019
Matrix: Groundwater
Client Sample ID: GP-4-W

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26564		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	96.8	64.2 - 128		%Rec	1	11/21/2019 12:58:22 AM

Client: AECOM
Collection Date: 11/16/2019 4:15:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-020
Matrix: Groundwater
Client Sample ID: **GP-5-W**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26599 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Chloromethane	ND	2.00		µg/L	1	11/23/2019 2:29:37 AM
Vinyl chloride	ND	0.200		µg/L	1	11/23/2019 2:29:37 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Chloroethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Methylene chloride	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Chloroform	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/23/2019 2:29:37 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Bromodichloromethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Chlorobenzene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
2-Chlorotoluene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/23/2019 2:29:37 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/23/2019 2:29:37 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	11/23/2019 2:29:37 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/23/2019 2:29:37 AM
Surr: Dibromofluoromethane	102	45.4 - 152		%Rec	1	11/23/2019 2:29:37 AM
Surr: Toluene-d8	99.2	40.1 - 139		%Rec	1	11/23/2019 2:29:37 AM

Analytical Report

Work Order: **1911240**
Date Reported: **11/25/2019**

Client: AECOM
Collection Date: 11/16/2019 4:15:00 PM
Project: Building C Phase II ESA
Lab ID: 1911240-020
Matrix: Groundwater
Client Sample ID: GP-5-W

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26599		Analyst: KT
Surr: 1-Bromo-4-fluorobenzene	94.8	64.2 - 128		%Rec	1	11/23/2019 2:29:37 AM

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26580** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **LCSS** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104829**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.10	0.0200	1.000	0	110	16.3	186				
Chloromethane	0.758	0.0500	1.000	0	75.8	49.5	153				
Vinyl chloride	1.14	0.0250	1.000	0	114	60	139				
Trichlorofluoromethane (CFC-11)	0.992	0.0200	1.000	0	99.2	66.2	137				
Chloroethane	0.982	0.0500	1.000	0	98.2	63.9	138				
1,1-Dichloroethene	1.05	0.0200	1.000	0	105	66	130				
Methylene chloride	1.04	0.0200	1.000	0	104	74.5	123				
trans-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	78.2	120				
1,1-Dichloroethane	0.974	0.0200	1.000	0	97.4	76.4	121				
cis-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	78.4	120				
Chloroform	1.01	0.0200	1.000	0	101	77.9	121				
1,1,1-Trichloroethane (TCA)	1.01	0.0250	1.000	0	101	78	121				
1,1-Dichloropropene	1.01	0.0200	1.000	0	101	78.9	120				
Carbon tetrachloride	1.01	0.0500	1.000	0	101	78.4	122				
1,2-Dichloroethane (EDC)	1.03	0.0200	1.000	0	103	76.2	124				
Trichloroethene (TCE)	1.01	0.0200	1.000	0	101	76.6	123				
1,2-Dichloropropane	1.01	0.0200	1.000	0	101	74.1	124				
Bromodichloromethane	1.03	0.0200	1.000	0	103	76.7	124				
cis-1,3-Dichloropropene	1.03	0.0200	1.000	0	103	72.8	124				
trans-1,3-Dichloropropylene	1.06	0.0200	1.000	0	106	74	123				
1,1,2-Trichloroethane	1.09	0.0200	1.000	0	109	73.8	126				
1,3-Dichloropropane	1.06	0.0250	1.000	0	106	73	126				
Tetrachloroethene (PCE)	1.01	0.0250	1.000	0	101	78.7	123				
Dibromochloromethane	1.06	0.0250	1.000	0	106	76	123				
Chlorobenzene	0.996	0.0250	1.000	0	99.6	81.3	118				
1,1,1,2-Tetrachloroethane	1.01	0.0250	1.000	0	101	77.9	121				
1,1,2,2-Tetrachloroethane	1.12	0.0200	1.000	0	112	71.3	125				
2-Chlorotoluene	1.01	0.0250	1.000	0	101	77.9	125				
4-Chlorotoluene	1.00	0.0250	1.000	0	100	80.7	121				
1,2,3-Trichloropropane	1.13	0.0250	1.000	0	113	70.6	130				
1,2,4-Trichlorobenzene	1.03	0.0250	1.000	0	103	78.8	127				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26580** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **LCSS** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104829**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	1.02	0.0200	1.000	0	102	84.8	121				
1,4-Dichlorobenzene	1.02	0.0200	1.000	0	102	84.7	121				
1,2-Dichlorobenzene	1.03	0.0200	1.000	0	103	84.6	121				
1,2-Dibromo-3-chloropropane	1.14	0.500	1.000	0	114	73	132				
Hexachloro-1,3-butadiene	1.01	0.0500	1.000	0	101	81.6	125				
1,2,3-Trichlorobenzene	1.07	0.0200	1.000	0	107	77	128				
Surr: Dibromofluoromethane	1.28		1.250		102	78.3	116				
Surr: Toluene-d8	1.25		1.250		100	84.2	114				
Surr: 1-Bromo-4-fluorobenzene	1.36		1.250		109	81.9	115				

Sample ID: **MB-26580** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **MBLKS** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104830**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0250									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0250									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0500									
1,2-Dichloroethane (EDC)	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-26580** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **MBLKS** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104830**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0250									
Dibromochloromethane	ND	0.0250									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
1,1,2,2-Tetrachloroethane	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0250									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
Hexachloro-1,3-butadiene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.23		1.250		98.1	78.3	116				
Surr: Toluene-d8	1.24		1.250		99.1	84.2	114				
Surr: 1-Bromo-4-fluorobenzene	1.21		1.250		96.9	81.9	115				

Sample ID: **1911240-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-3** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104804**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0165						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-3** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104804**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.0412						0		30	
Vinyl chloride	ND	0.0206						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0165						0		30	
Chloroethane	ND	0.0412						0		30	
1,1-Dichloroethene	ND	0.0165						0		30	
Methylene chloride	ND	0.0165						0		30	
trans-1,2-Dichloroethene	ND	0.0165						0		30	
1,1-Dichloroethane	ND	0.0165						0		30	
cis-1,2-Dichloroethene	ND	0.0165						0		30	
Chloroform	ND	0.0165						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0206						0		30	
1,1-Dichloropropene	ND	0.0165						0		30	
Carbon tetrachloride	ND	0.0412						0		30	
1,2-Dichloroethane (EDC)	ND	0.0165						0		30	
Trichloroethene (TCE)	ND	0.0165						0		30	
1,2-Dichloropropane	ND	0.0165						0		30	
Bromodichloromethane	ND	0.0165						0		30	
cis-1,3-Dichloropropene	ND	0.0165						0		30	
trans-1,3-Dichloropropylene	ND	0.0165						0		30	
1,1,2-Trichloroethane	ND	0.0165						0		30	
1,3-Dichloropropane	ND	0.0206						0		30	
Tetrachloroethene (PCE)	ND	0.0206						0		30	
Dibromochloromethane	ND	0.0206						0		30	
Chlorobenzene	ND	0.0206						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0206						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0165						0		30	
2-Chlorotoluene	ND	0.0206						0		30	
4-Chlorotoluene	ND	0.0206						0		30	
1,2,3-Trichloropropane	ND	0.0206						0		30	
1,2,4-Trichlorobenzene	ND	0.0206						0		30	
1,3-Dichlorobenzene	ND	0.0165						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-3** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104804**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.0165						0		30	
1,2-Dichlorobenzene	ND	0.0165						0		30	
1,2-Dibromo-3-chloropropane	ND	0.412						0		30	
Hexachloro-1,3-butadiene	ND	0.0412						0		30	
1,2,3-Trichlorobenzene	ND	0.0165						0		30	
Surr: Dibromofluoromethane	1.04		1.029		101	78.3	116		0		
Surr: Toluene-d8	1.04		1.029		101	84.2	114		0		
Surr: 1-Bromo-4-fluorobenzene	0.944		1.029		91.7	81.9	115		0		

Sample ID: **1911255-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **BATCH** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104816**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0304						0		30	
Chloromethane	ND	0.0761						0		30	
Vinyl chloride	ND	0.0380						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0304						0		30	
Chloroethane	ND	0.0761						0		30	
1,1-Dichloroethene	ND	0.0304						0		30	
Methylene chloride	ND	0.0304						0		30	
trans-1,2-Dichloroethene	ND	0.0304						0		30	
1,1-Dichloroethane	ND	0.0304						0		30	
cis-1,2-Dichloroethene	ND	0.0304						0		30	
Chloroform	ND	0.0304						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0380						0		30	
1,1-Dichloropropene	ND	0.0304						0		30	
Carbon tetrachloride	ND	0.0761						0		30	
1,2-Dichloroethane (EDC)	ND	0.0304						0		30	
Trichloroethene (TCE)	ND	0.0304						0		30	
1,2-Dichloropropane	ND	0.0304						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911255-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **BATCH** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104816**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	0.0304						0		30	
cis-1,3-Dichloropropene	ND	0.0304						0		30	
trans-1,3-Dichloropropylene	ND	0.0304						0		30	
1,1,2-Trichloroethane	ND	0.0304						0		30	
1,3-Dichloropropane	ND	0.0380						0		30	
Tetrachloroethene (PCE)	ND	0.0380						0		30	
Dibromochloromethane	ND	0.0380						0		30	
Chlorobenzene	ND	0.0380						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0380						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0304						0		30	
2-Chlorotoluene	ND	0.0380						0		30	
4-Chlorotoluene	ND	0.0380						0		30	
1,2,3-Trichloropropane	ND	0.0380						0		30	
1,2,4-Trichlorobenzene	ND	0.0380						0		30	
1,3-Dichlorobenzene	ND	0.0304						0		30	
1,4-Dichlorobenzene	ND	0.0304						0		30	
1,2-Dichlorobenzene	ND	0.0304						0		30	
1,2-Dibromo-3-chloropropane	ND	0.761						0		30	
Hexachloro-1,3-butadiene	ND	0.0761						0		30	
1,2,3-Trichlorobenzene	ND	0.0304						0		30	
Surr: Dibromofluoromethane	1.90		1.902		99.8	78.3	116		0		
Surr: Toluene-d8	1.91		1.902		100	84.2	114		0		
Surr: 1-Bromo-4-fluorobenzene	1.74		1.902		91.3	81.9	115		0		

Sample ID: **1911240-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-8** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104806**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.918	0.0245	1.224	0	75.0	15.2	191				
Chloromethane	1.07	0.0612	1.224	0	87.3	46.6	158				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-8** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104806**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	1.19	0.0306	1.224	0	96.9	54.6	148				
Trichlorofluoromethane (CFC-11)	1.33	0.0245	1.224	0	108	59.5	144				
Chloroethane	1.18	0.0612	1.224	0	96.0	50.5	167				
1,1-Dichloroethene	1.28	0.0245	1.224	0	105	62.1	142				
Methylene chloride	1.28	0.0245	1.224	0	104	61.4	136				
trans-1,2-Dichloroethene	1.26	0.0245	1.224	0	103	59.3	139				
1,1-Dichloroethane	1.27	0.0245	1.224	0	104	66.2	134				
cis-1,2-Dichloroethene	1.27	0.0245	1.224	0	104	65.4	133				
Chloroform	1.28	0.0245	1.224	0	104	67.8	132				
1,1,1-Trichloroethane (TCA)	1.31	0.0306	1.224	0	107	68	134				
1,1-Dichloropropene	1.27	0.0245	1.224	0	104	68.3	130				
Carbon tetrachloride	1.29	0.0612	1.224	0	105	66	135				
1,2-Dichloroethane (EDC)	1.27	0.0245	1.224	0	103	67.2	129				
Trichloroethene (TCE)	1.31	0.0245	1.224	0	107	52.2	147				
1,2-Dichloropropane	1.28	0.0245	1.224	0	104	62.6	130				
Bromodichloromethane	1.27	0.0245	1.224	0	104	65.8	129				
cis-1,3-Dichloropropene	1.23	0.0245	1.224	0	101	64.6	122				
trans-1,3-Dichloropropylene	1.24	0.0245	1.224	0	101	55.7	128				
1,1,2-Trichloroethane	1.30	0.0245	1.224	0	106	63.5	129				
1,3-Dichloropropane	1.25	0.0306	1.224	0	102	60.9	130				
Tetrachloroethene (PCE)	1.30	0.0306	1.224	0	106	70.2	130				
Dibromochloromethane	1.24	0.0306	1.224	0	101	62.4	129				
Chlorobenzene	1.26	0.0306	1.224	0	103	75.1	125				
1,1,1,2-Tetrachloroethane	1.27	0.0306	1.224	0	104	65.6	128				
1,1,2,2-Tetrachloroethane	1.27	0.0245	1.224	0	104	47.8	139				
2-Chlorotoluene	1.27	0.0306	1.224	0.02877	102	73.7	130				
4-Chlorotoluene	1.22	0.0306	1.224	0	99.9	74	128				
1,2,3-Trichloropropane	1.26	0.0306	1.224	0	103	59.7	145				
1,2,4-Trichlorobenzene	1.22	0.0306	1.224	0	99.8	71.2	131				
1,3-Dichlorobenzene	1.25	0.0245	1.224	0	102	77.8	126				
1,4-Dichlorobenzene	1.25	0.0245	1.224	0	102	78.1	126				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-8** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104806**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	1.28	0.0245	1.224	0	105	78.3	126				
1,2-Dibromo-3-chloropropane	1.32	0.612	1.224	0	107	68.1	132				
Hexachloro-1,3-butadiene	1.26	0.0612	1.224	0	103	70.6	136				
1,2,3-Trichlorobenzene	1.25	0.0245	1.224	0	102	72.2	132				
Surr: Dibromofluoromethane	1.59		1.530		104	78.3	116				
Surr: Toluene-d8	1.55		1.530		101	84.2	114				
Surr: 1-Bromo-4-fluorobenzene	1.61		1.530		105	81.9	115				

Sample ID: **1911240-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-8** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104807**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.868	0.0245	1.224	0	70.9	15.2	191	0.9179	5.58	30	
Chloromethane	1.07	0.0612	1.224	0	87.3	46.6	158	1.069	0.0310	30	
Vinyl chloride	1.14	0.0306	1.224	0	93.5	54.6	148	1.186	3.53	30	
Trichlorofluoromethane (CFC-11)	1.19	0.0245	1.224	0	97.0	59.5	144	1.325	11.0	30	
Chloroethane	1.18	0.0612	1.224	0	96.3	50.5	167	1.176	0.238	30	
1,1-Dichloroethene	1.25	0.0245	1.224	0	102	62.1	142	1.282	2.27	30	
Methylene chloride	1.24	0.0245	1.224	0	102	61.4	136	1.277	2.56	30	
trans-1,2-Dichloroethene	1.24	0.0245	1.224	0	102	59.3	139	1.264	1.62	30	
1,1-Dichloroethane	1.23	0.0245	1.224	0	101	66.2	134	1.272	3.21	30	
cis-1,2-Dichloroethene	1.24	0.0245	1.224	0	101	65.4	133	1.270	2.66	30	
Chloroform	1.23	0.0245	1.224	0	101	67.8	132	1.278	3.76	30	
1,1,1-Trichloroethane (TCA)	1.26	0.0306	1.224	0	103	68	134	1.306	3.59	30	
1,1-Dichloropropene	1.23	0.0245	1.224	0	101	68.3	130	1.274	3.38	30	
Carbon tetrachloride	1.26	0.0612	1.224	0	103	66	135	1.285	1.79	30	
1,2-Dichloroethane (EDC)	1.21	0.0245	1.224	0	99.1	67.2	129	1.267	4.28	30	
Trichloroethene (TCE)	1.26	0.0245	1.224	0	103	52.2	147	1.306	3.72	30	
1,2-Dichloropropane	1.23	0.0245	1.224	0	101	62.6	130	1.278	3.51	30	
Bromodichloromethane	1.24	0.0245	1.224	0	101	65.8	129	1.268	2.33	30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/21/2019** RunNo: **55515**
Client ID: **GP-1-8** Batch ID: **26580** Analysis Date: **11/21/2019** SeqNo: **1104807**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	1.21	0.0245	1.224	0	98.4	64.6	122	1.234	2.37	30	
trans-1,3-Dichloropropylene	1.20	0.0245	1.224	0	98.2	55.7	128	1.236	2.76	30	
1,1,2-Trichloroethane	1.27	0.0245	1.224	0	103	63.5	129	1.298	2.55	30	
1,3-Dichloropropane	1.24	0.0306	1.224	0	101	60.9	130	1.254	1.46	30	
Tetrachloroethene (PCE)	1.27	0.0306	1.224	0	104	70.2	130	1.296	2.04	30	
Dibromochloromethane	1.24	0.0306	1.224	0	101	62.4	129	1.240	0.170	30	
Chlorobenzene	1.25	0.0306	1.224	0	102	75.1	125	1.256	0.521	30	
1,1,1,2-Tetrachloroethane	1.25	0.0306	1.224	0	102	65.6	128	1.269	1.63	30	
1,1,2,2-Tetrachloroethane	1.22	0.0245	1.224	0	99.3	47.8	139	1.275	4.71	30	
2-Chlorotoluene	1.23	0.0306	1.224	0.02877	98.4	73.7	130	1.273	3.15	30	
4-Chlorotoluene	1.19	0.0306	1.224	0	97.0	74	128	1.223	3.00	30	
1,2,3-Trichloropropane	1.19	0.0306	1.224	0	97.6	59.7	145	1.261	5.39	30	
1,2,4-Trichlorobenzene	1.24	0.0306	1.224	0	101	71.2	131	1.222	1.25	30	
1,3-Dichlorobenzene	1.24	0.0245	1.224	0	101	77.8	126	1.251	0.782	30	
1,4-Dichlorobenzene	1.25	0.0245	1.224	0	102	78.1	126	1.250	0.0136	30	
1,2-Dichlorobenzene	1.25	0.0245	1.224	0	102	78.3	126	1.280	2.07	30	
1,2-Dibromo-3-chloropropane	1.29	0.612	1.224	0	105	68.1	132	1.316	1.98	30	
Hexachloro-1,3-butadiene	1.26	0.0612	1.224	0	103	70.6	136	1.265	0.730	30	
1,2,3-Trichlorobenzene	1.25	0.0245	1.224	0	102	72.2	132	1.250	0.166	30	
Surr: Dibromofluoromethane	1.57		1.530		102	78.3	116		0		
Surr: Toluene-d8	1.54		1.530		101	84.2	114		0		
Surr: 1-Bromo-4-fluorobenzene	1.58		1.530		103	81.9	115		0		

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26564** SampType: **LCS** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **LCSW** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103827**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	13.6	1.00	20.00	0	67.9	32.2	196				
Chloromethane	19.1	2.00	20.00	0	95.7	37.8	173				
Vinyl chloride	16.0	0.200	20.00	0	80.1	67.7	154				
Trichlorofluoromethane (CFC-11)	18.5	1.00	20.00	0	92.6	80.7	139				
Chloroethane	16.4	1.00	20.00	0	82.0	72.5	149				
1,1-Dichloroethene	18.1	1.00	20.00	0	90.7	82.5	140				
Methylene chloride	18.1	1.00	20.00	0	90.5	77.9	131				
trans-1,2-Dichloroethene	18.3	1.00	20.00	0	91.5	80.5	133				
1,1-Dichloroethane	18.0	1.00	20.00	0	90.1	77.8	135				
cis-1,2-Dichloroethene	18.4	1.00	20.00	0	92.2	82.1	130				
Chloroform	18.5	1.00	20.00	0	92.7	78.6	133				
1,1,1-Trichloroethane (TCA)	18.7	1.00	20.00	0	93.3	79.9	135				
1,1-Dichloropropene	18.3	1.00	20.00	0	91.6	83	134				
Carbon tetrachloride	18.6	1.00	20.00	0	93.2	79.3	137				
1,2-Dichloroethane (EDC)	18.6	1.00	20.00	0	92.8	71.1	134				
Trichloroethene (TCE)	19.7	0.500	20.00	0	98.7	80.9	133				
1,2-Dichloropropane	18.4	1.00	20.00	0	91.9	78.5	131				
Bromodichloromethane	18.6	1.00	20.00	0	93.2	75.9	132				
cis-1,3-Dichloropropene	19.3	1.00	20.00	0	96.5	71.6	127				
trans-1,3-Dichloropropylene	19.4	1.00	20.00	0	97.0	65.2	126				
1,1,2-Trichloroethane	18.7	1.00	20.00	0	93.5	71.7	136				
1,3-Dichloropropane	18.5	1.00	20.00	0	92.6	72.7	132				
Tetrachloroethene (PCE)	19.4	1.00	20.00	0	97.0	81.5	132				
Dibromochloromethane	18.7	1.00	20.00	0	93.3	70.8	131				
Chlorobenzene	20.1	1.00	20.00	0	100	84.5	124				
1,1,1,2-Tetrachloroethane	19.6	1.00	20.00	0	97.9	81.4	124				
1,1,2,2-Tetrachloroethane	17.4	1.00	20.00	0	87.2	78.7	124				
1,3,5-Trimethylbenzene	21.6	1.00	20.00	0	108	81.6	128				
2-Chlorotoluene	20.8	1.00	20.00	0	104	81.6	136				
4-Chlorotoluene	21.1	1.00	20.00	0	106	81.7	127				
1,2,3-Trichloropropane	20.3	1.00	20.00	0	101	63.1	137				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26564** SampType: **LCS** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **LCSW** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103827**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	21.9	2.00	20.00	0	109	80	130				
1,3-Dichlorobenzene	20.7	1.00	20.00	0	104	89.8	122				
1,4-Dichlorobenzene	20.9	1.00	20.00	0	104	89	122				
1,2-Dichlorobenzene	20.7	1.00	20.00	0	103	87.8	124				
1,2-Dibromo-3-chloropropane	19.9	1.00	20.00	0	99.3	62.9	142				
Hexachloro-1,3-butadiene	20.7	4.00	20.00	0	103	85.3	130				
1,2,3-Trichlorobenzene	21.0	4.00	20.00	0	105	74	139				
Surr: Dibromofluoromethane	23.6		25.00		94.4	81.1	118				
Surr: Toluene-d8	24.6		25.00		98.4	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.8		25.00		103	84.2	111				

Sample ID: **MB-26564** SampType: **MBLK** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **MBLKW** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103828**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									Q
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-26564** SampType: **MBLK** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **MBLKW** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103828**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
Hexachloro-1,3-butadiene	ND	4.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	22.7		25.00		90.6	45.4	152				
Surr: Toluene-d8	24.2		25.00		96.9	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00		98.7	64.2	128				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911257-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **BATCH** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103816**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	
Vinyl chloride	0.844	0.200						0.8031	4.94	30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911257-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **BATCH** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103816**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	2.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	23.3		25.00		93.2	45.4	152		0		
Surr: Toluene-d8	24.0		25.00		96.2	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	24.2		25.00		96.9	64.2	128		0		

Sample ID: **1911240-017ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **GP-2-W** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103810**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-017ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **GP-2-W** Batch ID: **26564** Analysis Date: **11/20/2019** SeqNo: **1103810**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	23.4		25.00		93.7	45.4	152		0		
Surr: Toluene-d8	24.4		25.00		97.5	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	24.1		25.00		96.6	64.2	128		0		

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-019AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **GP-4-W** Batch ID: **26564** Analysis Date: **11/21/2019** SeqNo: **1103813**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	8.78	1.00	20.00	0	43.9	32.2	196				
Chloromethane	16.7	2.00	20.00	0	83.5	37.8	173				
Vinyl chloride	19.7	0.200	20.00	5.450	71.1	67.7	154				
Trichlorofluoromethane (CFC-11)	19.7	1.00	20.00	0	98.5	80.7	139				
Chloroethane	17.2	1.00	20.00	0	86.1	72.5	149				
1,1-Dichloroethene	19.6	1.00	20.00	0	97.9	82.5	140				
Methylene chloride	19.4	1.00	20.00	0	96.8	77.9	131				
trans-1,2-Dichloroethene	20.0	1.00	20.00	0	100	80.5	133				
1,1-Dichloroethane	20.1	1.00	20.00	0	100	77.8	135				
cis-1,2-Dichloroethene	26.5	1.00	20.00	7.618	94.2	82.1	130				
Chloroform	23.5	1.00	20.00	2.955	103	78.6	133				
1,1,1-Trichloroethane (TCA)	21.0	1.00	20.00	0	105	79.9	135				
1,1-Dichloropropene	20.2	1.00	20.00	0	101	83	134				
Carbon tetrachloride	21.1	1.00	20.00	0	106	79.3	137				
1,2-Dichloroethane (EDC)	19.9	1.00	20.00	0	99.3	71.1	134				
Trichloroethene (TCE)	20.5	0.500	20.00	0	102	80.9	133				
1,2-Dichloropropane	19.8	1.00	20.00	0	99.1	78.5	131				
Bromodichloromethane	20.9	1.00	20.00	0.3269	103	75.9	132				
cis-1,3-Dichloropropene	19.4	1.00	20.00	0	96.8	71.6	127				
trans-1,3-Dichloropropylene	19.3	1.00	20.00	0	96.4	65.2	126				
1,1,2-Trichloroethane	19.5	1.00	20.00	0	97.6	71.7	136				
1,3-Dichloropropane	19.4	1.00	20.00	0	96.8	72.7	132				
Tetrachloroethene (PCE)	21.5	1.00	20.00	1.037	102	81.5	132				
Dibromochloromethane	20.0	1.00	20.00	0	100	70.8	131				
Chlorobenzene	21.1	1.00	20.00	0	105	84.5	124				
1,1,1,2-Tetrachloroethane	21.0	1.00	20.00	0	105	81.4	124				
1,1,2,2-Tetrachloroethane	18.7	1.00	20.00	0	93.3	78.7	124				
1,3,5-Trimethylbenzene	22.3	1.00	20.00	0	111	81.6	128				
2-Chlorotoluene	21.4	1.00	20.00	0	107	81.6	136				
4-Chlorotoluene	21.2	1.00	20.00	0	106	81.7	127				
1,2,3-Trichloropropane	19.7	1.00	20.00	0	98.5	63.1	137				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-019AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **GP-4-W** Batch ID: **26564** Analysis Date: **11/21/2019** SeqNo: **1103813**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	18.9	2.00	20.00	0	94.7	80	130				
1,3-Dichlorobenzene	20.3	1.00	20.00	0	101	89.8	122				
1,4-Dichlorobenzene	20.3	1.00	20.00	0	102	89	122				
1,2-Dichlorobenzene	20.4	1.00	20.00	0	102	87.8	124				
1,2-Dibromo-3-chloropropane	19.1	1.00	20.00	0	95.5	62.9	142				
Hexachloro-1,3-butadiene	17.8	4.00	20.00	0	88.8	85.3	130				
1,2,3-Trichlorobenzene	18.0	4.00	20.00	0	90.2	74	139				
Surr: Dibromofluoromethane	24.1		25.00		96.5	81.1	118				
Surr: Toluene-d8	24.9		25.00		99.6	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.4		25.00		102	84.2	111				

Sample ID: **1911240-019AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **GP-4-W** Batch ID: **26564** Analysis Date: **11/21/2019** SeqNo: **1103814**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	8.25	1.00	20.00	0	41.3	32.2	196	8.776	6.16	30	
Chloromethane	16.1	2.00	20.00	0	80.5	37.8	173	16.70	3.70	30	
Vinyl chloride	19.9	0.200	20.00	5.450	72.2	67.7	154	19.68	1.03	30	
Trichlorofluoromethane (CFC-11)	18.8	1.00	20.00	0	94.2	80.7	139	19.69	4.42	30	
Chloroethane	16.8	1.00	20.00	0	84.0	72.5	149	17.21	2.45	30	
1,1-Dichloroethene	19.1	1.00	20.00	0	95.4	82.5	140	19.59	2.64	30	
Methylene chloride	18.6	1.00	20.00	0	93.1	77.9	131	19.37	3.96	30	
trans-1,2-Dichloroethene	19.3	1.00	20.00	0	96.5	80.5	133	20.03	3.66	30	
1,1-Dichloroethane	19.5	1.00	20.00	0	97.3	77.8	135	20.09	3.16	30	
cis-1,2-Dichloroethene	27.1	1.00	20.00	7.618	97.2	82.1	130	26.47	2.23	30	
Chloroform	23.0	1.00	20.00	2.955	100	78.6	133	23.53	2.45	30	
1,1,1-Trichloroethane (TCA)	20.6	1.00	20.00	0	103	79.9	135	21.03	1.93	30	
1,1-Dichloropropene	19.7	1.00	20.00	0	98.3	83	134	20.24	2.87	30	
Carbon tetrachloride	20.7	1.00	20.00	0	104	79.3	137	21.14	1.93	30	
1,2-Dichloroethane (EDC)	19.1	1.00	20.00	0	95.7	71.1	134	19.86	3.72	30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911240-019AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/20/2019** RunNo: **55476**
Client ID: **GP-4-W** Batch ID: **26564** Analysis Date: **11/21/2019** SeqNo: **1103814**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	20.1	0.500	20.00	0	101	80.9	133	20.48	1.72	30	
1,2-Dichloropropane	19.4	1.00	20.00	0	96.9	78.5	131	19.81	2.22	30	
Bromodichloromethane	20.3	1.00	20.00	0.3269	99.8	75.9	132	20.88	2.94	30	
cis-1,3-Dichloropropene	18.8	1.00	20.00	0	94.0	71.6	127	19.36	2.96	30	
trans-1,3-Dichloropropylene	18.9	1.00	20.00	0	94.3	65.2	126	19.29	2.28	30	
1,1,2-Trichloroethane	18.7	1.00	20.00	0	93.7	71.7	136	19.52	4.02	30	
1,3-Dichloropropane	18.6	1.00	20.00	0	92.9	72.7	132	19.35	4.09	30	
Tetrachloroethene (PCE)	21.0	1.00	20.00	1.037	100	81.5	132	21.49	2.15	30	
Dibromochloromethane	19.1	1.00	20.00	0	95.5	70.8	131	20.03	4.68	30	
Chlorobenzene	20.8	1.00	20.00	0	104	84.5	124	21.08	1.52	30	
1,1,1,2-Tetrachloroethane	20.4	1.00	20.00	0	102	81.4	124	21.00	2.87	30	
1,1,2,2-Tetrachloroethane	18.5	1.00	20.00	0	92.7	78.7	124	18.65	0.652	30	
1,3,5-Trimethylbenzene	22.2	1.00	20.00	0	111	81.6	128	22.26	0.396	30	
2-Chlorotoluene	21.4	1.00	20.00	0	107	81.6	136	21.36	0.402	30	
4-Chlorotoluene	21.2	1.00	20.00	0	106	81.7	127	21.20	0.110	30	
1,2,3-Trichloropropane	19.4	1.00	20.00	0	96.9	63.1	137	19.71	1.68	30	
1,2,4-Trichlorobenzene	19.2	2.00	20.00	0	96.0	80	130	18.95	1.34	30	
1,3-Dichlorobenzene	20.4	1.00	20.00	0	102	89.8	122	20.27	0.653	30	
1,4-Dichlorobenzene	20.4	1.00	20.00	0	102	89	122	20.35	0.446	30	
1,2-Dichlorobenzene	20.3	1.00	20.00	0	102	87.8	124	20.36	0.271	30	
1,2-Dibromo-3-chloropropane	19.2	1.00	20.00	0	95.9	62.9	142	19.10	0.371	30	
Hexachloro-1,3-butadiene	17.9	4.00	20.00	0	89.4	85.3	130	17.75	0.663	30	
1,2,3-Trichlorobenzene	18.3	4.00	20.00	0	91.7	74	139	18.04	1.66	30	
Surr: Dibromofluoromethane	23.9		25.00		95.6	81.1	118		0		
Surr: Toluene-d8	24.7		25.00		98.6	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.3		25.00		101	84.2	111		0		

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26599** SampType: **LCS** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **LCSW** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105208**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	24.4	1.00	20.00	0	122	32.2	196				
Chloromethane	18.0	2.00	20.00	0	90.0	37.8	173				
Vinyl chloride	21.8	0.200	20.00	0	109	67.7	154				
Trichlorofluoromethane (CFC-11)	20.9	1.00	20.00	0	104	80.7	139				
Chloroethane	20.7	1.00	20.00	0	104	72.5	149				
1,1-Dichloroethene	20.2	1.00	20.00	0	101	82.5	140				
Methylene chloride	19.7	1.00	20.00	0	98.5	77.9	131				
trans-1,2-Dichloroethene	19.4	1.00	20.00	0	97.1	80.5	133				
1,1-Dichloroethane	19.3	1.00	20.00	0	96.5	77.8	135				
cis-1,2-Dichloroethene	19.3	1.00	20.00	0	96.6	82.1	130				
Chloroform	19.0	1.00	20.00	0	94.8	78.6	133				
1,1,1-Trichloroethane (TCA)	19.3	1.00	20.00	0	96.3	79.9	135				
1,1-Dichloropropene	18.4	1.00	20.00	0	92.2	83	134				
Carbon tetrachloride	19.1	1.00	20.00	0	95.6	79.3	137				
1,2-Dichloroethane (EDC)	19.0	1.00	20.00	0	94.8	71.1	134				
Trichloroethene (TCE)	19.1	0.500	20.00	0	95.7	80.9	133				
1,2-Dichloropropane	18.6	1.00	20.00	0	93.2	78.5	131				
Bromodichloromethane	19.2	1.00	20.00	0	96.1	75.9	132				
cis-1,3-Dichloropropene	18.8	1.00	20.00	0	94.0	71.6	127				
trans-1,3-Dichloropropylene	19.4	1.00	20.00	0	97.0	65.2	126				
1,1,2-Trichloroethane	19.4	1.00	20.00	0	97.2	71.7	136				
1,3-Dichloropropane	18.9	1.00	20.00	0	94.5	72.7	132				
Tetrachloroethene (PCE)	18.9	1.00	20.00	0	94.7	81.5	132				
Dibromochloromethane	19.4	1.00	20.00	0	97.2	70.8	131				
Chlorobenzene	18.9	1.00	20.00	0	94.7	84.5	124				
1,1,1,2-Tetrachloroethane	19.3	1.00	20.00	0	96.3	81.4	124				
1,1,2,2-Tetrachloroethane	20.2	1.00	20.00	0	101	78.7	124				
2-Chlorotoluene	19.2	1.00	20.00	0	95.9	81.6	136				
4-Chlorotoluene	18.6	1.00	20.00	0	93.2	81.7	127				
1,2,3-Trichloropropane	20.7	1.00	20.00	0	104	63.1	137				
1,2,4-Trichlorobenzene	19.4	2.00	20.00	0	96.9	80	130				

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26599** SampType: **LCS** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **LCSW** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105208**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	19.5	1.00	20.00	0	97.7	89.8	122				
1,4-Dichlorobenzene	19.7	1.00	20.00	0	98.4	89	122				
1,2-Dichlorobenzene	19.8	1.00	20.00	0	98.8	87.8	124				
1,2-Dibromo-3-chloropropane	20.8	1.00	20.00	0	104	62.9	142				
Hexachloro-1,3-butadiene	18.6	4.00	20.00	0	93.1	85.3	130				
1,2,3-Trichlorobenzene	19.6	4.00	20.00	0	98.0	74	139				
Surr: Dibromofluoromethane	25.6		25.00		102	81.1	118				
Surr: Toluene-d8	24.4		25.00		97.8	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	26.4		25.00		106	84.2	111				

Sample ID: **LCSD-26599** SampType: **LCSD** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **LCSW02** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105209**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	24.4	1.00	20.00	0	122	32.2	196	24.43	0.220	20	
Chloromethane	18.5	2.00	20.00	0	92.4	37.8	173	18.01	2.62	20	
Vinyl chloride	21.8	0.200	20.00	0	109	67.7	154	21.78	0.209	20	
Trichlorofluoromethane (CFC-11)	20.9	1.00	20.00	0	104	80.7	139	20.90	0.0957	20	
Chloroethane	20.9	1.00	20.00	0	105	72.5	149	20.74	0.843	20	
1,1-Dichloroethene	19.9	1.00	20.00	0	99.6	82.5	140	20.24	1.53	20	
Methylene chloride	20.0	1.00	20.00	0	99.9	77.9	131	19.69	1.43	20	
trans-1,2-Dichloroethene	19.7	1.00	20.00	0	98.4	80.5	133	19.41	1.38	20	
1,1-Dichloroethane	18.8	1.00	20.00	0	94.2	77.8	135	19.29	2.39	20	
cis-1,2-Dichloroethene	19.2	1.00	20.00	0	96.2	82.1	130	19.31	0.325	20	
Chloroform	19.3	1.00	20.00	0	96.5	78.6	133	18.96	1.78	20	
1,1,1-Trichloroethane (TCA)	19.2	1.00	20.00	0	96.2	79.9	135	19.26	0.0583	20	
1,1-Dichloropropene	18.1	1.00	20.00	0	90.5	83	134	18.44	1.80	20	
Carbon tetrachloride	19.5	1.00	20.00	0	97.4	79.3	137	19.12	1.87	20	
1,2-Dichloroethane (EDC)	19.3	1.00	20.00	0	96.6	71.1	134	18.97	1.86	20	
Trichloroethene (TCE)	19.0	0.500	20.00	0	94.8	80.9	133	19.13	0.877	20	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-26599** SampType: **LCSD** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **LCSW02** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105209**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	19.0	1.00	20.00	0	94.8	78.5	131	18.64	1.67	20	
Bromodichloromethane	19.4	1.00	20.00	0	97.2	75.9	132	19.23	1.13	20	
cis-1,3-Dichloropropene	18.6	1.00	20.00	0	93.0	71.6	127	18.81	1.06	20	
trans-1,3-Dichloropropylene	19.3	1.00	20.00	0	96.3	65.2	126	19.40	0.677	20	
1,1,2-Trichloroethane	19.5	1.00	20.00	0	97.4	71.7	136	19.43	0.246	20	
1,3-Dichloropropane	19.1	1.00	20.00	0	95.5	72.7	132	18.90	1.03	20	
Tetrachloroethene (PCE)	19.0	1.00	20.00	0	94.9	81.5	132	18.94	0.232	20	
Dibromochloromethane	19.5	1.00	20.00	0	97.3	70.8	131	19.43	0.114	20	
Chlorobenzene	18.9	1.00	20.00	0	94.3	84.5	124	18.95	0.454	20	
1,1,1,2-Tetrachloroethane	19.5	1.00	20.00	0	97.3	81.4	124	19.26	1.07	20	
1,1,2,2-Tetrachloroethane	20.7	1.00	20.00	0	103	78.7	124	20.21	2.25	20	
2-Chlorotoluene	19.4	1.00	20.00	0	97.1	81.6	136	19.18	1.20	20	
4-Chlorotoluene	19.1	1.00	20.00	0	95.4	81.7	127	18.64	2.36	20	
1,2,3-Trichloropropane	20.9	1.00	20.00	0	104	63.1	137	20.71	0.822	20	
1,2,4-Trichlorobenzene	19.6	2.00	20.00	0	98.1	80	130	19.38	1.18	20	
1,3-Dichlorobenzene	19.8	1.00	20.00	0	98.9	89.8	122	19.55	1.17	20	
1,4-Dichlorobenzene	19.7	1.00	20.00	0	98.6	89	122	19.67	0.262	20	
1,2-Dichlorobenzene	19.9	1.00	20.00	0	99.6	87.8	124	19.76	0.799	20	
1,2-Dibromo-3-chloropropane	21.3	1.00	20.00	0	106	62.9	142	20.81	2.24	20	
Hexachloro-1,3-butadiene	18.3	4.00	20.00	0	91.6	85.3	130	18.62	1.68	20	
1,2,3-Trichlorobenzene	19.8	4.00	20.00	0	98.9	74	139	19.61	0.855	20	
Surr: Dibromofluoromethane	25.6		25.00		102	81.1	118		0		
Surr: Toluene-d8	24.6		25.00		98.2	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	26.9		25.00		108	84.2	111		0		

Sample ID: **MB-26599** SampType: **MBLK** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **MBLKW** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-26599** SampType: **MBLK** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **MBLKW** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
1,3-Dichlorobenzene	ND	1.00									

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-26599** SampType: **MBLK** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **MBLKW** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
Hexachloro-1,3-butadiene	ND	4.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	25.7		25.00		103	45.4	152				
Surr: Toluene-d8	24.8		25.00		99.1	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	23.7		25.00		94.8	64.2	128				

Sample ID: **1911294-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **BATCH** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105182**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911294-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **BATCH** Batch ID: **26599** Analysis Date: **11/22/2019** SeqNo: **1105182**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	26.5		25.00		106	45.4	152		0		
Surr: Toluene-d8	24.9		25.00		99.6	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	25.2		25.00		101	64.2	128		0		

Sample ID: **1911298-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **BATCH** Batch ID: **26599** Analysis Date: **11/23/2019** SeqNo: **1105186**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911298-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **BATCH** Batch ID: **26599** Analysis Date: **11/23/2019** SeqNo: **1105186**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	

Work Order: 1911240
CLIENT: AECOM
Project: Building C Phase II ESA

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1911298-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/22/2019** RunNo: **55534**
Client ID: **BATCH** Batch ID: **26599** Analysis Date: **11/23/2019** SeqNo: **1105186**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	26.0		25.00		104	45.4	152		0		
Surr: Toluene-d8	24.8		25.00		99.2	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	23.1		25.00		92.3	64.2	128		0		

Sample Log-In Check List

Client Name:	**URS**	Work Order Number:	**1911240**
Logged by:	**Clare Griggs**	Date Received:	**11/18/2019 12:43:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >0°C to 10.0°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	2.9
Sample	4.3
Temp Blank	6.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/16/19 Page: 1 of: 2

Project Name: Building C Phase II ESA

Project No:

Collected by: Stu Holmes

Location: 16750 Redmond-Woodinville Rd NE

Report To (PM): David Raybvogel

PM Email: david.raybvogel@aecom.com

Laboratory Project No (internal): 1911240

Special Remarks: X = run sample
A = archive

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Client: AECOM

Address: 414 3rd Ave #1600

City, State, Zip: Seattle WA 98104

Telephone: 206-438-2700

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	cVOCs (EPA 8260)				Comments
1	GP-1-3	11/16/19	0945	S														X					
2	GP-1-8		1030															X					
3	GP-1-14.5		1040															A					
4	GP-2-4		1125															X					
5	GP-2-9.5		1135															X					
6	GP-2-14.5		1210															A					
7	GP-3-3.5		1145															X					
8	GP-3-10.5		1255															X					
9	GP-3-17		1305															A					
10	GP-4-7	↓	1430	↓														X					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Stu Holmes	11/18/19 1243	x	11/18/19 1243
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:

- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/16/19 Page: 2 of: 2

Project Name: Building C Phase II ESA

Project No:

Collected by: Stu Holmes

Location: 16750 Redmond-Woodinville Rd NE

Report To (PM): David Raubvogel

PM Email: david.raubvogel@aecom.com

Laboratory Project No (internal): 1911240

Special Remarks: X = run sample
A = archive

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Client: AECOM

Address: 1111 3rd Ave #1600

City, State, Zip: Seattle WA 98101

Telephone: 206-438-2700

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	cVOCs (EPA 8260 C)			Comments
1	GP-4-12	11/16/19	1445	S														X				
2	GP-4-15		1455															A				
3	GP-5-6		1525															X				
4	GP-5-13		1535															X				
5	GP-5-19.5		1545															A				
6	GP-1-W		1105	GW														X				
7	GP-2-W		1220															X				
8	GP-3-W		1320															X				
9	GP-4-W		1500															X				Additional Volume for lab QC
10	GP-5-W		1615															X				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Stu Holmes	11/18/19 1243	x	11/18/19 1243
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:

- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)