OSG O'Neill Service Group

May 21, 2020

Mr. Dean Yasuda
Hazardous Waste and Toxics Reduction Program
Washington State Department of Ecology Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008-5452

Subject: **Contained-In Determination Request, Supplemental Investigation**
Parcel FL-358
Sound Transit Federal Way Link Extension Project
2200 South 320th Street
Federal Way, Washington

Dear Mr. Yasuda:

This letter provides supplemental data in support of our request for a Contained-In determination dated March 20, 2020, and made on behalf of Sound Transit and their contractor Kiewit Infrastructure West Co. This submittal was completed following the Contained-In Determination Request checklist on the Department of Ecology webpage. A Voluntary Cleanup Program application has also been submitted for the proposed site remediation.

The purpose of this letter is to provide further analytical data and delineation of soils and groundwater to support the Contained-In Determination for the disposal of halogenated solvent-containing soils. The halogenated solvent-containing soils will be generated as part of site remediation and construction activities associated with the Sound Transit Federal Way Link Extension light rail project. The impacted soil contains concentrations of tetrachloroethylene (PCE) (F002 listed dangerous waste) and associated degradation products. The halogenated solvent-contaminated soils are associated with releases from a former dry cleaner located on the site parcel. The release site information is summarized below, and the site location is highlighted on Figure 1.

- Site listed as**:** Y Pay Mor Dry Cleaner
- Ecology Site Manager: Tamara Welty
- Facility Site ID Number: 2518
- Site Cleanup ID Number: 3180 (No Further Action determination, October 1998, with restrictive covenant, Attachment A)
- RCRA ID Number: WAD980983084

SITE BACKGROUND

The Site formerly contained a dry cleaner (Y Pay Mor Cleaners), which operated between 1979 and 1994. The dry cleaner is identified on the Ecology's listing of remedial sites. The current status of the cleanup is recorded as "No Further Action" with an environmental covenant in place as of 1998. The March 29, 2020 determination request letter describes the site history and remedial activities and investigations to date.

Because the Y Pay Mor site is a listed solvent release site, a Contained-In determination was requested on March 20, 2020 prior to remedial and construction-related excavation for soils within the project corridor containing detectable concentrations of F-listed solvents impacted by the site. This letter provides supplemental information to that request.

SUPPLEMENTAL SAMPLING AND ANALYSES

Soil and groundwater samples collected as part of post-remedial sampling in 1994 and associated with the 2017 Phase II ESA are summarized on Tables 1 and 2, and are discussed further in the original Contained-In determination request (OSG, March 20, 2020).

OSG conducted a supplemental soil and groundwater investigation at the site in April and May 2020. The investigation included: 1) sampling of existing wells to assess current groundwater conditions, 2) advancing soil borings at the site to further delineate soil and groundwater conditions and 3) selected soil and groundwater samples placed in a chilled cooler and transported under chain of custody protocol for analysis by a Washington Department of Ecology-accredited analytical laboratory for chlorinated VOCs by EPA Method 8260/5035A .

Soil borings were advanced at the site between May 7 and 11, 2020. Boring locations were selected to further delineate areas of known PCE and degradation products, as well as investigate current soil and groundwater conditions underlying the former tenant space, which was made accessible by recent building demolition.

Borings were completed to a maximum depth of 25 feet below ground surface using a hollow-stem drilling rig. Boring logs are included in Attachment A. Boring 358-B1 was advanced adjacent to a sewer line and vault on the east side of the former tenant space. Boring 358-B2 was advanced in an assumed upgradient position from the tenant space, as well as within an area of future subsurface construction (elevated rail piers). Borings 358-B3 and 358-B4 were completed north of the tenant space and were intended to delineate a PCE exceedance previously detected in GeoEngineers boring FL358-B1. Borings 358-B5 through 358-B9 were completed within and west of the former tenant space to delineate

residual solvent concentrations and to assess the sub-floor soil conditions after the 1990s soil remedial actions.

Soil samples were collected at 2.5- to 5-foot intervals, with soil samples selected for analysis based on prior detections, groundwater occurrence, and field screening. Shallow (5 foot) soil samples were also analyzed from borings completed in and adjacent to the tenant space. Supplemental samples were analyzed to further delineate the vertical extent of detections.

VOCs were not detected at laboratory reporting limits in samples collected from borings 358-B1 and 358-B2. Exceedances of PCE and TCE were detected in samples collected from boring 358-B3, completed west of GeoEngineers boring FL358-B1. The detections were at a comparable elevation to prior samples, indicating potential migration along a utility or subsurface feature. VOCs were not detected in boring 358-B4, completed east of FL358-B1. Of the borings completed within or adjacent west of the former tenant space, only samples collected at boring 358-B5 exceeded the MTCA cleanup level for PCE. These detections were between 20 and 25 feet below ground surface. This boring was completed near the original release location, and detection may be attributed to DNAPL migration. Exceedances of VOCs were not identified in shallow (5-foot) samples collected below the former tenant space, indicating that the former remedial system reduced soil impacts underlying the tenant space. Boring 358-B8 was advanced near the former AGRA boring B4, and in the vicinity of several drains or floor penetrations. Only Cis-1,2-DCE was detected in this boring, indicating that the soils at the B4 location have likely undergone remediation and degradation. Likewise, samples collected from assumed downgradient (west) borings either did not detect VOCs, or VOCs were degradation products well below the cleanup level. The results are summarized on Table 1 and Figure 3, and associated laboratory reports are included in Attachment B.

The existing wells were sampled on April 29, 2020. Groundwater samples were collected in general accordance with United States Environmental Protection Agency (USEPA, 2017) low-flow groundwater sampling guidelines. PCE and its breakdown products were not detected at laboratory reporting limits. The results are summarized on Table 2 and Figure 4, and associated laboratory reports are included in Attachment B.

Groundwater samples were also collected from selected borings to assess groundwater conditions below and adjacent to the former tenant space. Temporary screens were installed in the borings and the water levels allowed to stabilize prior to sampling. Groundwater samples were collected in general accordance with United States Environmental Protection Agency (USEPA, 2017) low-flow groundwater sampling guidelines. Groundwater exceedances for PCE and its degradation products were detected in

borings 358-B3 and 358-B5, where PCE was also detected in one or more soil samples. PCE and its degradation products were also detected in borings 358-B6 and 358-B7, located to the west (assumed downgradient) of the former tenant space. The results are summarized on Table 2 and Figure 4, and associated laboratory reports are included in Attachment B.

The Fremont Analytical data packages include laboratory QA/QC documentation confirming that the samples were received in good condition under proper protocols, and that analytical results and in-house quality control (method blanks, laboratory duplicates, etc.) met data quality objectives. Analytical results were not flagged or otherwise qualified in the Fremont Analytical reports (Attachment B).

SOIL CONTAINED-IN DETERMINATION

The detected PCE is attributed to historic solvent releases from the on-site dry-cleaning facility. No other potential sources were identified during due diligence or other investigations.

The transport mechanisms for the PCE detected in soils at the Site are likely attributed to either DNAPL or soil vapor transport through shallow fill soils and along utilities underlying the former dry cleaner tenant space on the property (on-site sewer, etc.), as well as dispersion through shallow groundwater.

SOIL EXCAVATION AND VOLUME

The planned soil disturbance and excavation is located within Sound Transit's Parcel Number FL-358 (a portion of King County Parcel Number 2423200050 (Figure 2). Per the Environmental Covenant, Ecology has been notified of upcoming soil disturbance and remedial activities. Work will be performed under a site-specific Cleanup Action Plan (CAP) developed for the parcel by OSG on behalf of Kiewit Infrastructure West Co. and Sound Transit. Soil excavation will be up to 15 below existing grade (Soils Conditional Point of Compliance). The construction schedule for building demolition commencing at the Site on April 15, 2020, with soil excavation within the area of solvent-contaminated soils will begin in June, 2020. The work area and area of delineated affected soils of concern are attached as Figure 4.

The volume of soil to be designated for Contained-In determination is approximately 9,000 tons. The volume is based on the area delineated via soil sampling overlaid on the project excavation plan. At the location of the subject soils, the area is approximately 7,500 square feet in area. The total volume of these excavations is approximately 6,000 cubic yards x 1.5 tons per cubic yard = 9,000 tons.

Groundwater encountered during excavation activities will be managed via on-site treatment systems and discharged under an Administrative Order issued for the site.

DISPOSAL

Based on the laboratory analytical results and regulatory review, the soils do not designate as Dangerous Waste under State criteria (WAC 173-303-090 and WAC 173-303-100) (Table 1). The area is not known to contain any other constituents that might classify as Dangerous Waste, including metals. No soils exceeding EPA Land Disposal Restriction limits (60 mg/kg for PCE and TCE) were identified as part of this determination request (Table 1).

The proposed disposal facility for the delisted soils is Republic Services Roosevelt Regional Landfill located in Roosevelt, Washington (Dana Hopper; Industrial Account Manager 206-332-7742; dhopper@republicservices.com).

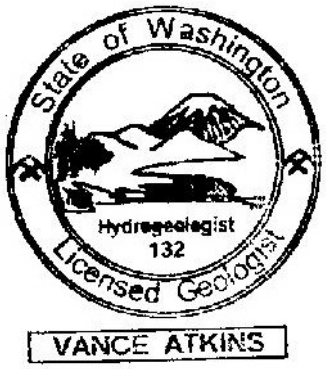
During construction and excavation, the soils will be excavated and directly containerized into covered and lined roll-off boxes or similar for direct-haul and disposal at the licensed landfill following the Ecology requirements.

CLOSING

We trust this report meets your needs to complete the contained-in determination. Please contact the undersigned at (425) 677-3009 if you have any questions or require additional information.

Sincerely,
O'Neill Service Group

Vance Atkins, LG, LHG
Project Manager



List of Figures and Tables:

Figure 1:	Vicinity Map
Figure 2:	Site and Adjacent Parcels
Figure 3:	Site Specific Soil Sample Results
Figure 4:	Site Specific Groundwater Sample Results
Table 1:	Summary of Soil Analytical Results
Table 2:	Summary of Groundwater Analytical Results

List of Attachments

Attachment A:	Soil Boring Logs
Attachment B:	Analytical Laboratory Reports

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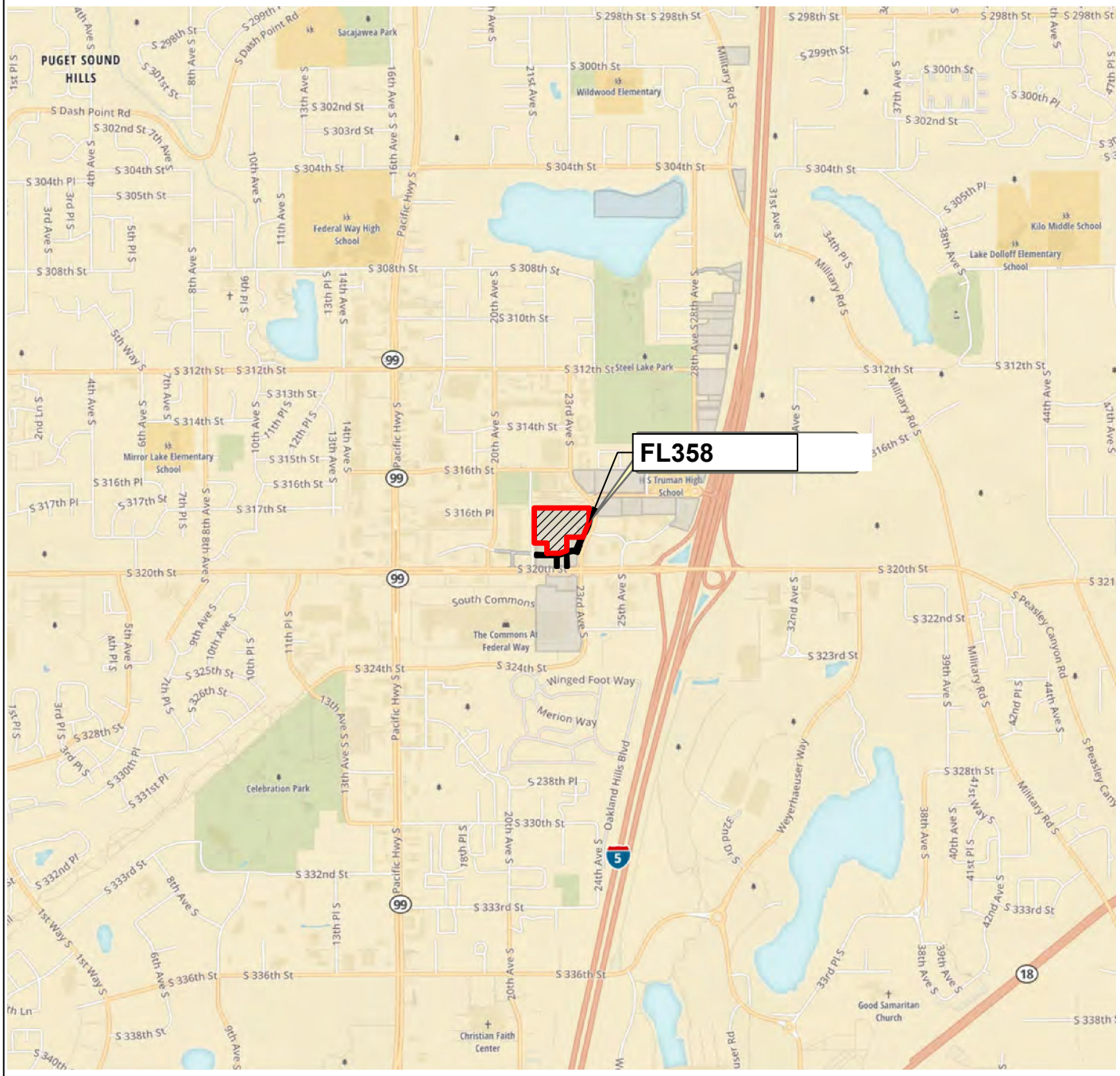

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Not to Scale

Reference: Base file Vicinity Map FL358, FL361, FL363 by GeoEngineers, dated 11-28-17.

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FEDERAL WAY LINK EXTENSION
SEATAC AND FEDERAL WAY
KING COUNTY, WASHINGTON

VICINITY MAP

Drawn By:	J. Stewart
Reviewed By:	V. Atkins
Approved By:	V. Atkins
Date:	May 2020
Project No.:	2021

FIGURE

1

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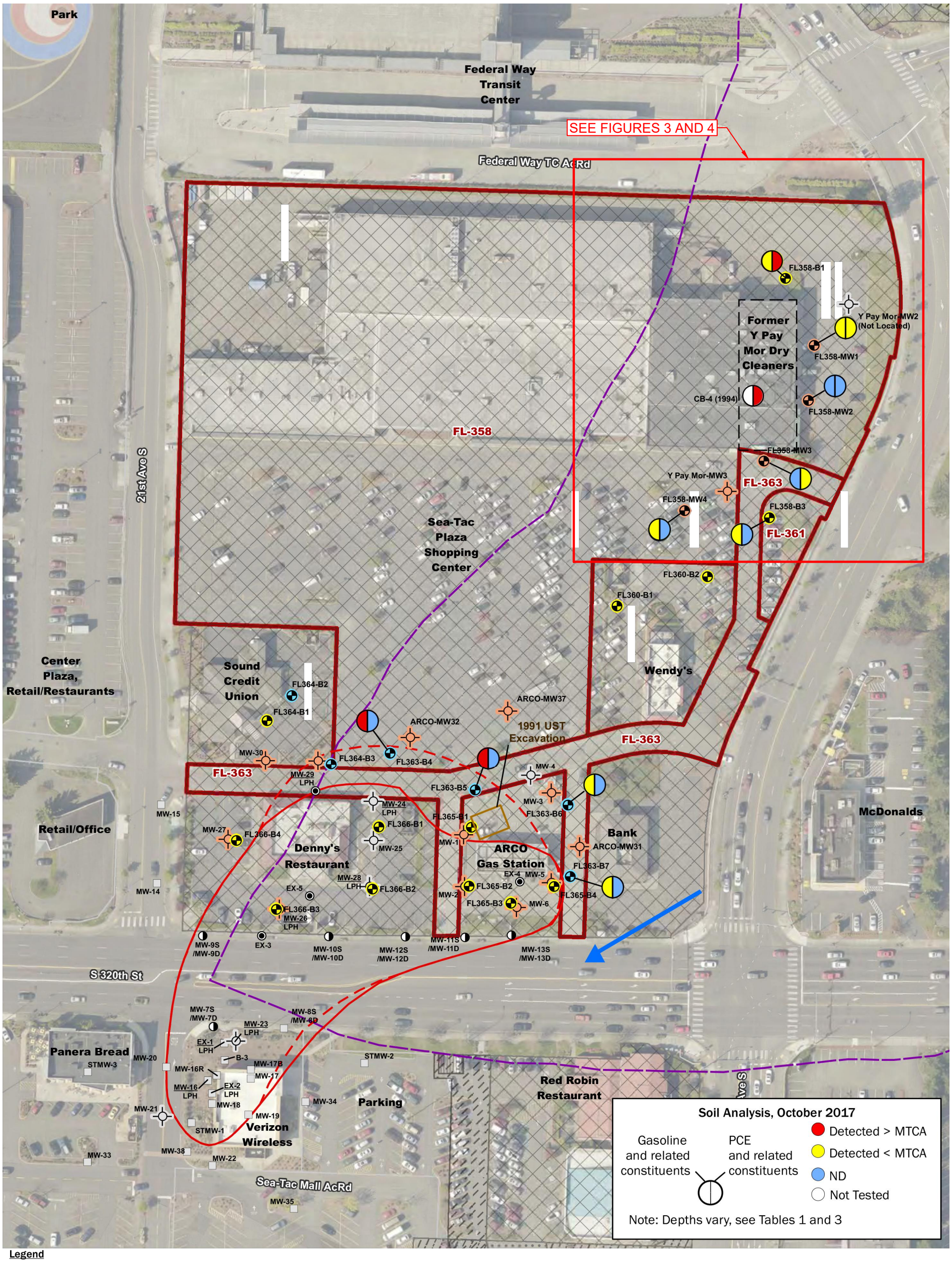

Legend

- GeoEngineers Phase II ESA Monitoring Well
- GeoEngineers Phase II ESA Soil Boring
- GeoEngineers Phase II ESA Boring with Grab Water Sample
- Monitoring Well by Others Not Sampled or Located
- Monitoring Well by Others Sampled for Phase II ESA
- LPH — Liquid Phase Hydrocarbons in Past
- Dual Completion Well Location
- Extraction Well Location
- Abandoned or Destroyed Well Location
- Estimate of gas plume >MTCA based on 2015 data
- Estimate of gas plume >MTCA based on 2017 data
- Boundary Mapped Historic Drainage Area (c. 1949)
- Subject Property
- Parcel
- Access Easement
- Fee Take
- Guideway Easement
- Permanent and Slope Easement
- Temporary Construction Easement
- Approximate Groundwater Flow Direction

Reference: Base file Chemical Analytical Results Soil by GeoEngineers, dated 11-29-2017.

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FEDERAL WAY LINK EXTENSION
SEATAC AND FEDERAL WAY
KING COUNTY, WASHINGTON

SITE AND ADJACENT PARCELS

Drawn By:	J. Stewart
Reviewed By:	V. Atkins
Approved By:	V. Atkins
Date:	May 2020
Project No.:	2021

FIGURE 2

358-B4	cis-1,2-DCE	PCE
15-16	<0.0275	<0.0344
20-21.5	<0.0235	<0.0294

FL358-B1	cis-1,2-DCE	TCE	PCE
5-6	0.0053	<0.0097	<0.0097
10-11	0.0140	0.0076	0.016
13-14	0.0043	0.0022	**0.066**

358-B5	cis-1,2-DCE	PCE
5-6.5	**0.0810**	<0.0321
10-11.5	<0.0225	<0.0281
15-16.5	<0.0220	<0.0275
20-21	<0.0188	**0.3580**
25-25.5	<0.0236	**0.1230**

358-B3	cis-1,2-DCE	TCE	PCE
10-11	<0.0204	<0.0204	<0.0254
12-13.5	**0.0235**	<0.0196	**0.0830**
15-16.5	**0.0379**	**0.0379**	**0.1210**
20-20.5	<0.0189	<0.0189	**0.0384**

FL358-MW1	cis-1,2-DCE	TCE	PCE
19-20	**0.0016**	**0.0033**	**0.0049**

358-B2	cis-1,2-DCE	PCE
12-13	<0.0253	<0.0317
25-25.5	<0.0238	<0.0297

358-B6	cis-1,2-DCE	PCE
5-6.5	**0.0949**	<0.0395
10-11.5	<0.0187	<0.0233
20-20.5	<0.0197	**0.0269**

358-B7	cis-1,2-DCE	PCE
5-6.5	**0.0509**	**0.0438**
10-11	<0.0174	<0.0218
20-21	**0.0245**	<0.0213

358-B1	cis-1,2-DCE	PCE
10-11	<0.0224	<0.0280
20-20.5	<0.0179	<0.0224

B-4 (1994)	cis-1,2-DCE	TCE	PCE
5-6.5	**0.33**	<0.1	**1.3**

358-B9	cis-1,2-DCE	PCE
7.5-9	<0.00989	<0.0124
12.5-13.5	<0.0175	<0.0219
20-20.5	<0.0221	<0.0276

358-B8	cis-1,2-DCE	PCE
5-6.5	**0.2050**	<0.0331
12.5-13	<0.0199	<0.0249
20-20.5	<0.0244	<0.0305

358-B4 358-B3 FL358-B1 358-B5 FL358-MW1 358-B2 358-B6 358-B7 358-B8 358-B1 B-4 (1994) FL358-MW2 358-B9 FL358-MW3 Y PAY MOR-MW3 FL358-MW4 FL358-B3 FL363 FL361

Boring ID	Analyte
Sample Depth, ft bgs	Concentration, mg/kg
	Exceeds MTCA Cleanup Level

LEGEND

CID, SUBTITLE D DISPOSAL

NOTE: NORTHINGS/EASTINGS ARE APPROXIMATE AND PROVIDED FOR REFERENCE ONLY.

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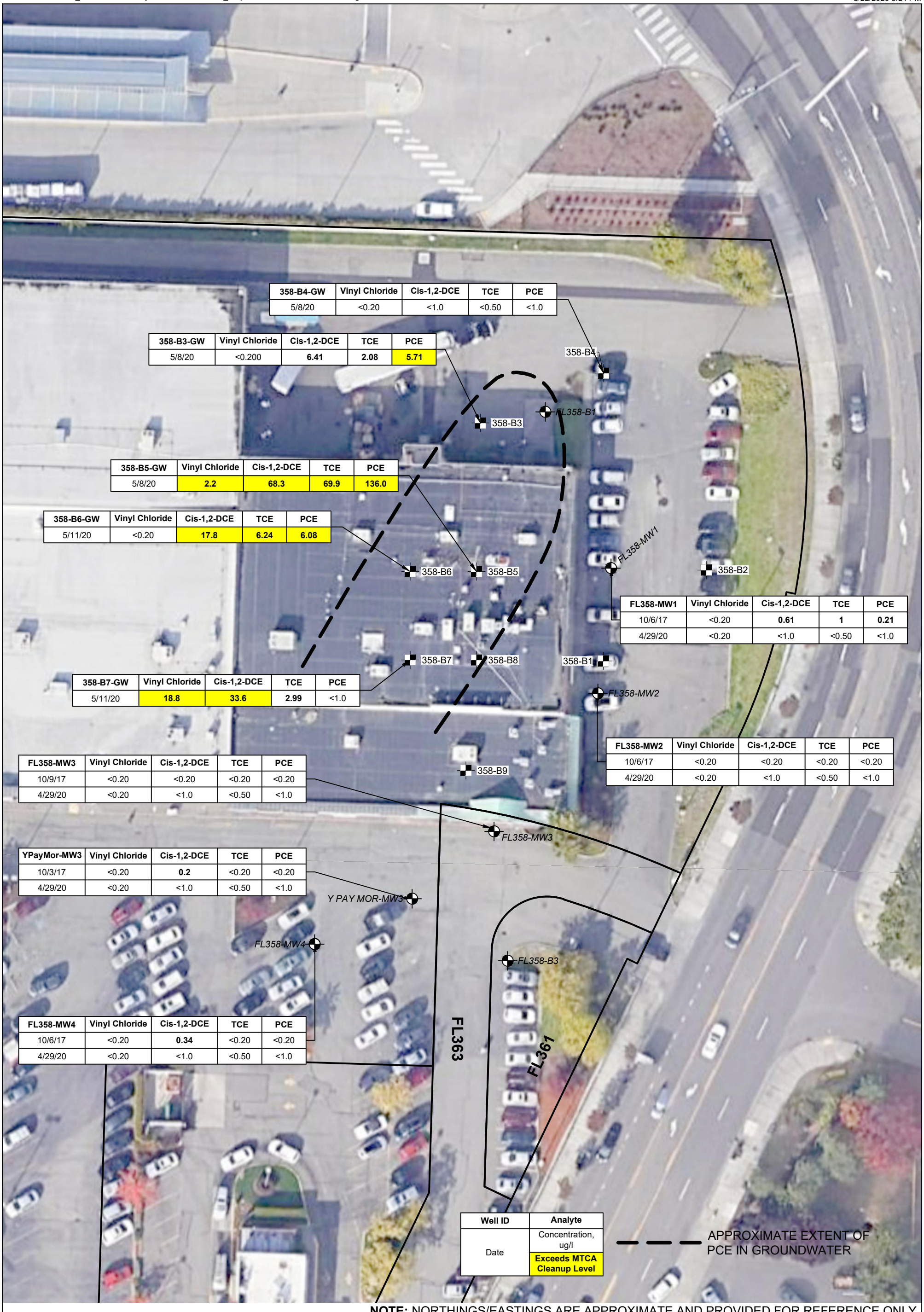
FEDERAL WAY LINK EXTENSION
SEATAC AND FEDERAL WAY
KING COUNTY, WASHINGTON

SITE SPECIFIC SOIL SAMPLE RESULTS

Drawn By: *J. Stewart*
Reviewed By: *V. Atkins*
Approved By: *S. Darst*
Date: *May 2020*
Project No.: *2021*

FIGURE **3**



NOTE: NORTHINGS/EASTINGS ARE APPROXIMATE AND PROVIDED FOR REFERENCE ONLY.

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SCALE IN FEET

O'Neill Service Group

FEDERAL WAY LINK EXTENSION
SEATAC AND FEDERAL WAY
KING COUNTY, WASHINGTON

SITE SPECIFIC GROUNDWATER SAMPLE RESULTS

Drawn By:	J. Stewart
Reviewed By:	V. Atkins
Approved By:	S. Darst
Date:	May 2020
Project No.:	2021

FIGURE 4

Table 1
Soil Analytical Results
Former Y Pay Mor Drycleaner
2200 S 320th St
Federal Way, Washington

Lab Report ID	Date	Sample ID	Depth (ft bgs)	VOCs[1] (mg/kg)		
				Cis-1,2-DCE	TCE	PCE
94081902	11/16/94	**B3/S1**	4-5	**0.11**	<0.1	<0.1
94081902	11/16/94	**B4/S1**	5-6.5	**0.33**	<0.1	**1.3**
94081902	11/16/94	**B5/S1**	6.5-8	**71**	<0.1	<0.1
94081902	11/16/94	**B7/S1**	4-5	**0.75**	<0.1	<0.1
1710-072	10/5/17	**FL358-B1-5-6**	5-6	**0.0053**	<0.00097	<0.00097
1710-072	10/5/17	**FL358-B1-10-11**	10-11	**0.014**	**0.0076**	**0.016**
1710-072	10/5/17	**FL358-B1-13-14**	13-14	**0.0043**	**0.0022**	**0.066**
1710-010	10/2/17	**FL358-MW1-19-20**	19-20	**0.0016**	**0.0033**	**0.0049**
2005069	5/7/20	**358-B1-10**	10-11	<0.0224	<0.0224	<0.0280
2005069	5/7/20	**358-B1-20**	20-20.5	<0.0179	<0.0179	<0.0224
2005069	5/7/20	**358-B2-12.5**	12-13	<0.0253	<0.0253	<0.0317
2005069	5/7/20	**358-B2-25**	25-25.5	<0.0238	<0.0238	<0.0297
2005069	5/7/20	**358-B3-10**	10-11	<0.0204	<0.0204	<0.0254
2005069	5/7/20	**358-B3-12.5**	12-13.5	**0.0235**	<0.0196	**0.083**
2005069	5/7/20	**358-B3-15**	15-16.5	**0.0669**	**0.0379**	**0.121**
2005069	5/7/20	**358-B3-20**	20-20.5	<0.0189	<0.0189	**0.0384**
2005085	5/8/20	**358-B4-15**	15-16	<0.0275	<0.0275	<0.0344
2005085	5/8/20	**358-B4-20**	20-21.5	<0.0235	<0.0235	<0.0294
2005085	5/8/20	**358-B5-5**	5-6.5	**0.081**	<0.0257	<0.0321
2005085	5/8/20	**358-B5-10**	10-11.5	<0.0225	<0.0225	<0.0281
2005085	5/8/20	**358-B5-15**	15-16.5	<0.0220	<0.0220	<0.0275
2005085	5/8/20	**358-B5-20**	20-21	<0.0188	<0.0188	**0.358**
2005085	5/8/20	**358-B5-25**	25-25.5	<0.0236	<0.0236	**0.123**
2005085	5/8/20	**358-B6-5**	5-6.5	**0.0949**	<0.0316	<0.0395
2005085	5/8/20	**358-B6-10**	10-11.5	<0.0187	<0.0187	<0.0233
2005085	5/8/20	**358-B6-20**	20-20.5	<0.0197	<0.0197	**0.0269**
2005098	5/11/20	**358-B7-5**	5-6.5	**0.0509**	<0.0185	**0.0438**
2005098	5/11/20	**358-B7-10**	10-11	<0.0174	<0.0174	<0.0218
2005098	5/11/20	**358-B7-20**	20-21	**0.0245**	<0.0170	<0.0213
2005098	5/11/20	**358-B8-5**	5-6.5	**0.205**	<0.0265	<0.0331
2005098	5/11/20	**358-B8-12.5**	12.5-13	<0.0199	<0.0199	<0.0249
2005098	5/11/20	**358-B8-20**	20-20.5	<0.0244	<0.0244	<0.0305
2005098	5/11/20	**358-B9-7.5**	7.5-9	<0.00989	<0.00989	<0.0124
2005098	5/11/20	**358-B9-12.5**	12.5-13.5	<0.0175	<0.0175	<0.0219
2005098	5/11/20	**358-B9-20**	20-20.5	<0.0221	<0.0221	<0.0276
MTCA Method A Soil Cleanup Level, Unrestricted (Ecology, 2013)					0.03	0.05
MTCA Method B Soil Cleanup Level (Ecology, 2015)				160	40	476.19
WAC 173-303 Dangerous Waste Limit (mg/l, TCLP Methodology)				n/a	0.5	0.7
WAC 173-303 Dangerous Waste Screening (mg/kg, 20 times TCLP limit)				n/a	10	14
EPA Land Disposal Restriction Limit, mg/kg				n/a	60	60

Notes:
< - Not detected at listed laboratory reporting limit
Bold - Analyte detected
Bold/Highlighted - Concentration exceeds MTCA Method A Cleanup Level for soil
1 - Samples analyzed for VOCs by EPA Method 8260. See laboratory report for complete list.

Table 2
Groundwater Analytical Results
Former Y Pay Mor Drycleaner
2210 S 320th St
Federal Way, Washington

Lab Report ID	Date	Sample ID	Depth to Water (ft below TOC)	Field Parameters				VOCs (ug/l)			
				Temp (°C)	pH	Dissolved Oxygen (mg/l)	Conductivity (mS/cm)	Vinyl Chloride	Cis-1,2-DCE	TCE	PCE
1710-083	10/6/17	**FL358-MW1**	NA	NA	NA	NA	NA	<0.20	**0.61**	**1**	**0.21**
2004413	4/29/20		6.61	13.2	5.94	0.09	545	<0.20	<1.0	<0.50	<1.0
1710-083	10/6/17	**FL358-MW2**	NA	NA	NA	NA	NA	<0.20	<0.20	<0.20	<0.20
2004413	4/29/20		6.0	13.5	5.34	0.22	447	<0.20	<1.0	<0.50	<1.0
1710-105	10/9/17	**FL358-MW3**	NA	NA	NA	NA	NA	<0.20	<0.20	<0.20	<0.20
2004413	4/29/20		7.4	14.1	59	0.15	503	<0.20	<1.0	<0.50	<1.0
1710-083	10/6/17	**FL358-MW4**	NA	NA	NA	NA	NA	<0.20	**0.34**	<0.20	<0.20
2004413	4/29/20		8.98	13.5	5.79	0.19	610	<0.20	<1.0	<0.50	<1.0
1710-031	10/3/17	**YPayMor-MW3**	NA	NA	NA	NA	NA	<0.20	**0.2**	<0.20	<0.20
2004413	4/29/20		7.0	14.1	5.87	0.13	517	<0.20	<1.0	<0.50	<1.0
2005086	5/8/20	**358-B3-GW**	9.8	13	6.42	6.26	714	<0.200	**6.41**	**2.08**	**5.71**
2005086	5/8/20	**358-B4-GW**	8.1	14.4	6.58	5.7	1750	<0.20	<1.0	<0.50	<1.0
2005086	5/8/20	**358-B5-GW**	9.3	16.5	6.93	6.61	2406	**2.2**	**68.3**	**69.9**	**136**
2005099	5/11/20	**358-B6-GW**	8.8	15.7	6.07	0.3	1422	<0.20	**17.8**	**6.24**	**6.08**
2005099	5/11/20	**358-B7-GW**	8.9	17.7	5.91	1.15	901	**18.8**	**33.6**	**2.99**	<1.0
							MTCA Method A or B Cleanup Level (mg/l)	0.2	16 (B)	5	5

Notes:
< - Not detected at listed laboratory reporting limit
Bold - Analyte detected
Bold/Highlighted - Analyte exceeds MTCA Method A or B cleanup level
1 - Samples analyzed for VOCs by EPA Method 8260. See laboratory report for complete list.

Attachment A:
Soil Boring Logs

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B1
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	9'				
TIME				START	FINISH
DATE	5/7/2020				
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE
CHECKED BY:
DATE: 5/7/20
LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
							ASPHALT	
	18/18		7/11/10	0		ML	MEDIUM DENSE BLUE GRAY TO BROWN SILTY SAND WITH GRAVEL TO COBBLES TRACE ROOTS MOIST/ NO ODOR/ STAIN	
	18/18		6/8/10	0.2	5	ML/PT	RED DENSE DARK BROWN SILT WITH ORGANICS/PEAT - TRACE GRAVEL MOIST - NO ODOR	
	6/18		16/17/25	0			DENSE DARK BROWN SILTY SAND WITH GRAVEL - MOIST NO ODOR/ STAIN	▽
	6/12		30/50-6"	0	10	SM	DENSE GRAY SILTY SAND WITH GRAVEL, LIMITED RECOVERY - WET - NO ODOR/ STAINING	
	6/6		50-6"	0	15		RIG CHATTER VERY DENSE GRAY SAND WITH SILT - GRAVEL - WET - NO ODOR /STAIN	
	6/6		50-6"	0	20	SP/SM	VERY DENSE GRAY MEDIUM DENSE WITH SILT AND FINE GRAVEL - WET (SAND - ADD WATER)	
	6/6		50-6"	0	25		VERY DENSE GRAY MEDIUM SAND WITH CLAYEY SAND/ FINE GRAVEL - WET	
					30			
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B2
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	14'			START	FINISH
TIME					
DATE	5/7/2020				
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE

CHECKED BY:

DATE: 5/7/20

LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
							ASPHALT	
	18/18		18/19/13	0	5	SM	MEDIUM DENSE BROWN SILTY SAND WITH ORGANICS, GRADING GRAY SILTY SAND WITH GRAVEL, MOIST. NO ODOR OR STAINING	
			100-4"	0	10		NO RECOVERY, WOODY DEBRIS	
	10/10		21/50-5"	0			VERY DENSE DARK BROWN SILTY SAND WITH GRAVEL, GRAY LAYERS, MOIST. NO ODOR OR STAINING	▽
	18/18		21/20/24	0	15	ML/OL	MEDIUM DENSE/STIFF DARK BRWON SILT AND PEAT/ORGANIC SILT, WET. NO ODOR OR STAINING	
	18/18		19/23/30	0	20	SP/SM	VERY DENSE GRAY-BROWN MEDIUM SAND WITH SILT GRAVEL, GRAVEL TO 2", WET. NO ODOR OR STAINING	
							(HEAVE)	
	6/6		50-6"	0	25		VERY DENSE GRAY-BROWN MEDIUM SAND WITH SILT GRAVEL, WET. NO ODOR OR STAINING	
					30			
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B3
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	16'	9.8'		START	FINISH
TIME					
DATE	5/7/2020	5/8/2020			
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE
CHECKED BY:
DATE: 5/7/20
LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
						GP	ASPHALT	
							GRAVELLY SAND (FILL)	
					5	SM		
	11/11		23/00-5"	0			DENSE GRAY-BROWN SILTY SAND WITH GRAVEL, TRACE OXIDATION, MOIST. NO ODOR OR STAINING	
	15/18		22/22/30	0		ML	VERY STIFF GRAY-BROWN MOTTLED SILT WITH SAND, TRACE GRAVEL, MOIST. NO ODOR OR STAINING	
								▼
	18/18		25/29/29	0	10		VERY STIFF GRAY-BROWN MOTTLED SILT WITH SAND, TRACE GRAVEL, MOIST. NO ODOR OR STAINING	
	18/18		12/24/21	0			VERY STIFF GRAY-BROWN MOTTLED SILT WITH SAND, TRACE GRAVEL, MOIST. NO ODOR OR STAINING, LIGHT BROWN, MOTTLED, MOIST.	
			21/25/25	0	15		STIFF GRAY SILT WITH SAND AND CLAY, SLIGHTLY PLASTIC, MOIST. NO ODOR OR STAINING	▽
						GM	GRADING GRAVELLY	
			50/6"	0	20		VERY DENSE BROWN SILTY GRAVEL, WET. (HEAVE)	
					25		TEMPORARY SCREEN 15-20'	
					30			
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B4
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	16'	8.1'		START	FINISH
TIME					
DATE	5/8/2020	5/8/2020			
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE
CHECKED BY:
DATE: 5/7/20
LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
							ASPHALT	
	6/6		50-6"	0	5	SM	VERY DENSE DARK GRAY SILTY SAND WITH GRAVEL, MOIST. NO ODOR OR STAINING	
	0/0		100-6"				NO RECOVERY	▼
	18/18		33/29/30	0	10		VERY DENSE GRAY SILT AND SAND WITH FINE GRAVEL, BROWN LAYERS, MOIST GRADING WET. NO ODOR OR STAINING	
	18/18		33/21/29	0			VERY DENSE/STIFF GRAY MOTTLED SILT WITH SAND AND GRAVEL, SLIGHTLY PLASTIC, MOIST. NO ODOR OR STAINING	
	12/12		33/50-6"	0	15		VERY DENSE/STIFF GRAY MOTTLED SILT WITH SAND AND GRAVEL, SLIGHTLY PLASTIC, MOIST. NO ODOR OR STAINING, DECREASING OXIDATION	▽
	18/18		31/30/32	0	20	SM/ML	VERY DENSE GRAY-BROWN SILT AND SAND WITH SILTY FINE SAND LAYERS, WET. NO ODOR OR STAINING	
			50/6"	0	25		VERY DENSE GRAY-BROWN SILT AND SAND WITH GRAVEL, WET. NO ODOR OR STAINING	
					30		TEMPORARY SCREEN 20-25'	
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B5
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	15'	9.3'		START	FINISH
TIME					
DATE	5/8/2020	5/8/2020			
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE
CHECKED BY:
DATE: 5/7/20
LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
							CONCRETE	
						SP	BROWN SAND WITH SILT AND GRAVEL (FILL)	
	18/18		32/15/20	0		SM	DENSE GRAY-BROWN SILTY SAND WITH GAVEL, MOIST. NO ODOR OR STAINING	
	18/18		18/19/18	0	5	SM/OL	MEDIUM DENSE BROWNISH YELLOW SAND WITH SILT AND GRAVEL, MOIST. GRADING DARK RED-BROWN PEAT/ORGANIC SILT	
	18/18		13/8/14	0			INTERBEDDED SAND WITH SILT AND PEAT, TRACE GRAVEL, WET. NO ODOR OR STAINING	▼
	18/18		19/25/27	0	10	SM	DENSE GRAY-BROWN SILTY SAND WITH GRAVEL, WET. NO ODOR OR STAINING	
	6/6		30-6"	0			DENSE GRAY-BROWN SILTY SAND WITH GRAVEL, WET. NO ODOR OR STAINING, VERY DENSE	▽
	18/18		12/27/32	0	15	ML	GRADING VERY STIFF GRAY-BROWN MOTTLED SILT WITH SAND AND GRAVEL, WET. NO ODOR OR STAINING.	
	12/12		24/50-6"	0	20		GRADING HARD GRAY-BROWN MOTTLED SILT WITH SAND AND GRAVEL, WET. NO ODOR OR STAINING, VERY STIFF, WITH OXIDATION.	
			50/4"	0	25	GM/ML	VERY DENSE GRAY GRAVELLY SILT, WET. NO ODOR OR STAINING	
					30		TEMPORARY SCREEN 15-25'	
					35			

OSG O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B6
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	10'	8.8'			
TIME				START	FINISH
DATE	5/8/2020	5/11/2020			
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE

CHECKED BY:

DATE: 5/7/20

LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
						SM/ML	4" CONCRETE	
	12/18		8/10/19	0	5		GRAY SANDY/SILT & GRAVEL (FILL) NO ODOR OR STAINING	
							DARK BROWN SANDY SILT AND PEAT WITH WOOD FRAGMENTS, NO ODOR OR STAINING	
	6/6		50/6"	0.2			GRAINY SILTY SAND WITH GRAVEL	
							VERY DENSE, MOIST	▼
								▽
	18/18		11/19/21	0	10		GRAY VERY DENSE SILTY SAND WITH GRAVEL, TRACE WOOD - NO ODOR OR STAINING	
						SM		
	6/6		50-6"	0			GRAY VERY DENSE SILTY SAND WITH GRAVEL, TRACE WOOD - NO ODOR OR STAINING	
	6/6		50-6"	0	15		GRAY VERY DENSE SILTY SAND WITH GRAVEL, TRACE WOOD - NO ODOR OR STAINING	
	6/6		50-6"	0	20		VERY DENSE BROWN SILTY SAND WITH GRAVEL, WET NO ODOR OR STAINING	
	6/6		50-6"	0	25		VERY DENSE GREY SILTY SAND WITH FINE GRAVEL, WET	
					30		TEMPORARY SCREEN 15-25'	
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B7
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	13'	8.9'		START	FINISH
TIME					
DATE	5/11/2020	5/11/2020			
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE
CHECKED BY:
DATE: 5/7/20
LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
					0		CONCRETE	
	0/12		27-50-6"			SP/PT	NO RECOVERY (DRIVING COBBLE?)	
	6/18		36/32/43	0	5		VERY DENSE BROWN SAND WITH GRAVEL WITH PEAT/ORGANIC LAYER, MOIST. NO ODOR OR STAINING	
	6/12		43/50-6"	0		SP/SM	VERY DENSE GRAY SAND WITH SILT AND GRAVEL, MOIST. NO ODOR OR STAINING	▼
	12/12		20/50-6"	0	10	ML	HARD OLIVE-GRAY SILT WITH SAND, MOTTLED, MOIST. NO ODOR OR STAINING	
							GRADING WET	▽
	18/18		22/35/47	0	15		HARD OLIVE-GRAY SILT WITH SAND, TRACE FINE GRAVEL, MOTTLED, WET. NO ODOR OR STAINING	
	12/12		22/50-6"	0	20	SM	VERY DENSE GRAY-BROWN SILTY SAND WITH GRAVEL, WET. NO ODOR OR STAINING	
	12/12		32/50-6"	0	25		VERY DENSE BROWN SILTY SAND WITH GRAVEL, WET. NO ODOR OR STAINING	
					30		TEMPORARY SCREEN 15-25'	
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B8
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	12'				
TIME				START	FINISH
DATE	5/11/2020				
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE

CHECKED BY:

DATE: 5/7/20

LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
							CONCRETE	
	6/6		50-6"	0		SM	VERY DENSE BROWN SILTY MEDIUM SAND, TRACE GRAVEL AND SANDY LAYERS, MOIST. NO ODOR OR STAINING	
	18/18		16/15/24	0	5	ML/PT	MEDIUM DENSE/VERY STIFF DARK BROWN SILT AND PEAT WITH SILTY SAND LAYERS, MOIST. NO ODOR OR STAINING	
	6/6		50-6"	0			HARD OLIVE-GRAY SILT WITH SAND, TRACE FINE GRAVEL, MOTTLED, MOIST GRADING WET. NO ODOR OR STAINING	
	12/12		23/50-6"	0	10		HARD OLIVE-GRAY SILT WITH SAND, TRACE FINE GRAVEL, TRACE CLAY, MOTTLED, WET. NO ODOR OR STAINING	▽
	6/6		50-6"	0		ML	AS ABOVE, GRAY TO BROWN, TRACE ORGANIC, WET.	
	12/12		31/50-6"	0	15		AS ABOVE, VERY STIFF, LIGHT BROWN WITH MOTTLING.	
	12/12		31/50-6"	0	20	SM/ML	VERY DENSE GRAY-BROWN SILT AND SAND WITH GRAVEL, TRACE OXIDATION, WET. NO ODOR OR STAINING	
			50-6"	0	25		AS ABOVE	
					30			
					35			

O'Neill Service Group

FIELD BORING LOG

LOCATION OF BORING:	PROJECT NO: 2021	CLIENT: KIEWIT	BORING NO: 358-B9
	DRILLING METHOD: CME75 HSA		SHEET: 1 OF 1
	SAMPLING METHOD: DAMES & MOORE/140# HAMMER		

				DRILLING	
WATER LEVEL:	12'			START	FINISH
TIME					
DATE	5/11/2020				
CASING DEPTH					

DRILLING CONTRACTOR: CASCADE
CHECKED BY:
DATE: 5/7/20
LOGGED BY: V. ATKINS

SAMPLE TYPE / SAMPLE NO.	INCHES DRIVEN / RECOVERED	SAMPLE DEPTH INTERVAL	BLOWS PER 6 INCHES	PID (PPM)	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS: / ELEVATION: / SOIL DESCRIPTION	GROUNDWATER / WELL DIAGRAM
							CONCRETE	
						SP	BROWN SAND WITH GRAVEL (FILL)	
	6/6		50-6"	0			VERY DENSE GRAY SILTY SAND WITH GRAVEL, MOIST. NO ODOR OR STAINING	
						SM		
	0/18		24/15/12	0	5		NO RECOVERY (DRIVING COBBLE OR WOOD?)	
	6/18		6/8/50-6"	0			VERY DENSE/HARD GRAY SILTY SAND GRADING SILT WITH SAND, TRACE GRAVEL, MOIST. NO APPARENT ODOR OR STAINING.	
						SM/ML		
	12/12		46/50-6"	0	10		VERY DENSE/HARD GRAY SILT AND SAND WITH GRAVEL, MOIST GRADING WET. NO APPARENT ODOR OR STAINING.	▽
	12/12		37/50-6"	0			VERY DENSE GRAY SILTY SAND WITH GRAVEL, WET. NO APPARENT ODOR OR STAINING.	
	12/12		33/50-6"	0	15		VERY DENSE GRAY-BROWN SAND WITH SILT AND GRAVEL, WET. NO ODOR OR STAINING.	
	6/6		50-6"	0	20		VERY DENSE GRAY SILTY SAND WITH GRAVEL, WET. SLIGHT HEAVE. NO APPARENT ODOR OR STAINING.	
						SM		
	12/12		26/50-6"	0	25		AS ABOVE (HEAVE)	
					30			
					35			

Attachment B:
Analytical Laboratory Reports

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

O'Neill Service Group
Vance Atkins
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: F200
Work Order Number: 2004413

May 07, 2020

Attention Vance Atkins:

Fremont Analytical, Inc. received 6 sample(s) on 4/29/2020 for the analyses presented in the following report.

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: *05/07/2020*

CLIENT: O'Neill Service Group
Project: F200
Work Order: 2004413

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2004413-001	FL358-MW4	04/29/2020 10:05 AM	04/29/2020 4:24 PM
2004413-002	YPM4-MW3	04/29/2020 10:40 AM	04/29/2020 4:24 PM
2004413-003	FL358-MW3	04/29/2020 11:25 AM	04/29/2020 4:24 PM
2004413-004	FL358-MW2	04/29/2020 12:05 PM	04/29/2020 4:24 PM
2004413-005	FL358-MW1	04/29/2020 12:40 PM	04/29/2020 4:24 PM
2004413-006	Trip Blank	04/27/2020 3:20 PM	04/29/2020 4:24 PM

Case Narrative

WO#: **2004413**
Date: **5/7/2020**

CLIENT: O'Neill Service Group
Project: F200

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: O'Neill Service Group
Project: F200

Lab ID: 2004413-001 **Collection Date:** 4/29/2020 10:05:00 AM
Client Sample ID: **FL358-MW4** **Matrix:** Water

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/6/2020 7:45:10 PM
Chloromethane	ND	2.00	Q	µg/L	1	5/6/2020 7:45:10 PM
Vinyl chloride	ND	0.200		µg/L	1	5/6/2020 7:45:10 PM
Bromomethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Chloroethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Methylene chloride	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Chloroform	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/6/2020 7:45:10 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Dibromomethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/6/2020 7:45:10 PM
Chlorobenzene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Bromoform	ND	2.00		µg/L	1	5/6/2020 7:45:10 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
Bromobenzene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/6/2020 7:45:10 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 7:45:10 PM

CLIENT: O'Neill Service Group
Project: F200

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

1,2-Dichlorobenzene	ND	1.00	µg/L	1	5/6/2020 7:45:10 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	5/6/2020 7:45:10 PM
Hexachloro-1,3-butadiene	ND	4.00	µg/L	1	5/6/2020 7:45:10 PM
1,2,3-Trichlorobenzene	ND	4.00	µg/L	1	5/6/2020 7:45:10 PM
Surr: Dibromofluoromethane	94.1	81.1 - 118	%Rec	1	5/6/2020 7:45:10 PM
Surr: Toluene-d8	98.6	85.7 - 113	%Rec	1	5/6/2020 7:45:10 PM
Surr: 1-Bromo-4-fluorobenzene	97.5	84.2 - 111	%Rec	1	5/6/2020 7:45:10 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

CLIENT: O'Neill Service Group
Project: F200

Lab ID: 2004413-002 **Collection Date:** 4/29/2020 10:40:00 AM
Client Sample ID: **YPM4-MW3** **Matrix:** Water

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/6/2020 8:15:22 PM
Chloromethane	ND	2.00	Q	µg/L	1	5/6/2020 8:15:22 PM
Vinyl chloride	ND	0.200		µg/L	1	5/6/2020 8:15:22 PM
Bromomethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Chloroethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Methylene chloride	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Chloroform	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/6/2020 8:15:22 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Dibromomethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/6/2020 8:15:22 PM
Chlorobenzene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Bromoform	ND	2.00		µg/L	1	5/6/2020 8:15:22 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
Bromobenzene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/6/2020 8:15:22 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 8:15:22 PM

CLIENT: O'Neill Service Group
Project: F200

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

1,2-Dichlorobenzene	ND	1.00	µg/L	1	5/6/2020 8:15:22 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	5/6/2020 8:15:22 PM
Hexachloro-1,3-butadiene	ND	4.00	µg/L	1	5/6/2020 8:15:22 PM
1,2,3-Trichlorobenzene	ND	4.00	µg/L	1	5/6/2020 8:15:22 PM
Surr: Dibromofluoromethane	93.6	81.1 - 118	%Rec	1	5/6/2020 8:15:22 PM
Surr: Toluene-d8	99.0	85.7 - 113	%Rec	1	5/6/2020 8:15:22 PM
Surr: 1-Bromo-4-fluorobenzene	97.9	84.2 - 111	%Rec	1	5/6/2020 8:15:22 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

CLIENT: O'Neill Service Group
Project: F200

Lab ID: 2004413-003 **Collection Date:** 4/29/2020 11:25:00 AM
Client Sample ID: **FL358-MW3** **Matrix:** Water

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/6/2020 8:45:34 PM
Chloromethane	ND	2.00	Q	µg/L	1	5/6/2020 8:45:34 PM
Vinyl chloride	ND	0.200		µg/L	1	5/6/2020 8:45:34 PM
Bromomethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Chloroethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Methylene chloride	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Chloroform	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/6/2020 8:45:34 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Dibromomethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/6/2020 8:45:34 PM
Chlorobenzene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Bromoform	ND	2.00		µg/L	1	5/6/2020 8:45:34 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
Bromobenzene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/6/2020 8:45:34 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 8:45:34 PM

CLIENT: O'Neill Service Group
Project: F200

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

1,2-Dichlorobenzene	ND	1.00	µg/L	1	5/6/2020 8:45:34 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	5/6/2020 8:45:34 PM
Hexachloro-1,3-butadiene	ND	4.00	µg/L	1	5/6/2020 8:45:34 PM
1,2,3-Trichlorobenzene	ND	4.00	µg/L	1	5/6/2020 8:45:34 PM
Surr: Dibromofluoromethane	94.6	81.1 - 118	%Rec	1	5/6/2020 8:45:34 PM
Surr: Toluene-d8	99.7	85.7 - 113	%Rec	1	5/6/2020 8:45:34 PM
Surr: 1-Bromo-4-fluorobenzene	97.4	84.2 - 111	%Rec	1	5/6/2020 8:45:34 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

CLIENT: O'Neill Service Group
Project: F200

Lab ID: 2004413-004 **Collection Date:** 4/29/2020 12:05:00 PM
Client Sample ID: **FL358-MW2** **Matrix:** Water

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/6/2020 9:15:51 PM
Chloromethane	ND	2.00	Q	µg/L	1	5/6/2020 9:15:51 PM
Vinyl chloride	ND	0.200		µg/L	1	5/6/2020 9:15:51 PM
Bromomethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Chloroethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Methylene chloride	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Chloroform	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/6/2020 9:15:51 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Dibromomethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/6/2020 9:15:51 PM
Chlorobenzene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Bromoform	ND	2.00		µg/L	1	5/6/2020 9:15:51 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
Bromobenzene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/6/2020 9:15:51 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 9:15:51 PM

CLIENT: O'Neill Service Group
Project: F200

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

1,2-Dichlorobenzene	ND	1.00	µg/L	1	5/6/2020 9:15:51 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	5/6/2020 9:15:51 PM
Hexachloro-1,3-butadiene	ND	4.00	µg/L	1	5/6/2020 9:15:51 PM
1,2,3-Trichlorobenzene	ND	4.00	µg/L	1	5/6/2020 9:15:51 PM
Surr: Dibromofluoromethane	94.7	81.1 - 118	%Rec	1	5/6/2020 9:15:51 PM
Surr: Toluene-d8	99.0	85.7 - 113	%Rec	1	5/6/2020 9:15:51 PM
Surr: 1-Bromo-4-fluorobenzene	98.3	84.2 - 111	%Rec	1	5/6/2020 9:15:51 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

CLIENT: O'Neill Service Group
Project: F200

Lab ID: 2004413-005 **Collection Date:** 4/29/2020 12:40:00 PM
Client Sample ID: **FL358-MW1** **Matrix:** Water

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/6/2020 9:46:08 PM
Chloromethane	ND	2.00	Q	µg/L	1	5/6/2020 9:46:08 PM
Vinyl chloride	ND	0.200		µg/L	1	5/6/2020 9:46:08 PM
Bromomethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Chloroethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Methylene chloride	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Chloroform	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/6/2020 9:46:08 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Dibromomethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/6/2020 9:46:08 PM
Chlorobenzene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Bromoform	ND	2.00		µg/L	1	5/6/2020 9:46:08 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
Bromobenzene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/6/2020 9:46:08 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 9:46:08 PM

CLIENT: O'Neill Service Group
Project: F200

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

1,2-Dichlorobenzene	ND	1.00	µg/L	1	5/6/2020 9:46:08 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	5/6/2020 9:46:08 PM
Hexachloro-1,3-butadiene	ND	4.00	µg/L	1	5/6/2020 9:46:08 PM
1,2,3-Trichlorobenzene	ND	4.00	µg/L	1	5/6/2020 9:46:08 PM
Surr: Dibromofluoromethane	94.1	81.1 - 118	%Rec	1	5/6/2020 9:46:08 PM
Surr: Toluene-d8	99.8	85.7 - 113	%Rec	1	5/6/2020 9:46:08 PM
Surr: 1-Bromo-4-fluorobenzene	96.9	84.2 - 111	%Rec	1	5/6/2020 9:46:08 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

CLIENT: O'Neill Service Group
Project: F200

Lab ID: 2004413-006 **Collection Date:** 4/27/2020 3:20:00 PM
Client Sample ID: **Trip Blank** **Matrix:** Water

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/6/2020 7:14:54 PM
Chloromethane	ND	2.00	Q	µg/L	1	5/6/2020 7:14:54 PM
Vinyl chloride	ND	0.200		µg/L	1	5/6/2020 7:14:54 PM
Bromomethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Chloroethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Methylene chloride	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Chloroform	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/6/2020 7:14:54 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Dibromomethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/6/2020 7:14:54 PM
Chlorobenzene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Bromoform	ND	2.00		µg/L	1	5/6/2020 7:14:54 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
Bromobenzene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/6/2020 7:14:54 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/6/2020 7:14:54 PM

CLIENT: O'Neill Service Group
Project: F200

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28248 Analyst: CR

1,2-Dichlorobenzene	ND	1.00	µg/L	1	5/6/2020 7:14:54 PM
1,2-Dibromo-3-chloropropane	ND	1.00	µg/L	1	5/6/2020 7:14:54 PM
Hexachloro-1,3-butadiene	ND	4.00	µg/L	1	5/6/2020 7:14:54 PM
1,2,3-Trichlorobenzene	ND	4.00	µg/L	1	5/6/2020 7:14:54 PM
Surr: Dibromofluoromethane	96.4	81.1 - 118	%Rec	1	5/6/2020 7:14:54 PM
Surr: Toluene-d8	98.6	85.7 - 113	%Rec	1	5/6/2020 7:14:54 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	84.2 - 111	%Rec	1	5/6/2020 7:14:54 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28248** SampType: **LCS** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **LCSW** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179490**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.4	1.00	20.00	0	81.8	14.5	175				
Chloromethane	17.5	2.00	20.00	0	87.4	44.8	153				
Vinyl chloride	19.0	0.200	20.00	0	95.2	64.1	131				
Bromomethane	19.6	1.00	20.00	0	97.9	34.2	171				
Trichlorofluoromethane (CFC-11)	20.0	1.00	20.00	0	99.8	77.4	121				
Chloroethane	19.6	1.00	20.00	0	98.1	73.3	123				
1,1-Dichloroethene	20.1	1.00	20.00	0	101	81.8	116				
Acetone	49.2	5.00	50.00	0	98.4	47.6	157				
Methylene chloride	19.7	1.00	20.00	0	98.6	80.4	116				
trans-1,2-Dichloroethene	20.0	1.00	20.00	0	100	83.1	115				
1,1-Dichloroethane	19.8	1.00	20.00	0	99.0	79.5	119				
cis-1,2-Dichloroethene	20.1	1.00	20.00	0	101	83.5	115				
Chloroform	20.2	1.00	20.00	0	101	81	117				
1,1,1-Trichloroethane (TCA)	20.2	1.00	20.00	0	101	82.8	116				
1,1-Dichloropropene	20.0	1.00	20.00	0	99.8	81.5	117				
Carbon tetrachloride	20.1	1.00	20.00	0	100	83.3	114				
1,2-Dichloroethane (EDC)	20.0	1.00	20.00	0	100	78.4	118				
Trichloroethene (TCE)	20.3	0.500	20.00	0	101	82.2	116				
1,2-Dichloropropane	19.9	1.00	20.00	0	99.7	78	120				
Bromodichloromethane	19.7	1.00	20.00	0	98.7	80.9	116				
Dibromomethane	20.3	1.00	20.00	0	102	80	117				
cis-1,3-Dichloropropene	20.4	1.00	20.00	0	102	79.8	118				
trans-1,3-Dichloropropylene	20.5	1.00	20.00	0	103	75.8	122				
1,1,2-Trichloroethane	20.6	1.00	20.00	0	103	77.8	120				
1,3-Dichloropropane	20.5	1.00	20.00	0	102	76.5	121				
Tetrachloroethene (PCE)	20.8	1.00	20.00	0	104	86.2	114				
Dibromochloromethane	20.3	1.00	20.00	0	101	78	117				
1,2-Dibromoethane (EDB)	20.6	0.250	20.00	0	103	76.8	120				
Chlorobenzene	20.0	1.00	20.00	0	100	85.2	112				
1,1,1,2-Tetrachloroethane	20.0	1.00	20.00	0	100	85.5	110				
Bromoform	19.8	2.00	20.00	0	99.2	73.4	119				

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28248** SampType: **LCS** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **LCSW** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179490**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	20.6	1.00	20.00	0	103	74.8	124				
Bromobenzene	19.8	1.00	20.00	0	99.0	83.2	116				
2-Chlorotoluene	20.0	1.00	20.00	0	100	81.8	119				
4-Chlorotoluene	19.9	1.00	20.00	0	99.4	81.6	118				
1,2,3-Trichloropropane	20.2	1.00	20.00	0	101	73.2	126				
1,2,4-Trichlorobenzene	21.1	2.00	20.00	0	106	68.7	138				
1,3-Dichlorobenzene	20.9	1.00	20.00	0	104	90.7	114				
1,4-Dichlorobenzene	20.8	1.00	20.00	0	104	90.1	114				
1,2-Dichlorobenzene	20.9	1.00	20.00	0	105	90.1	115				
1,2-Dibromo-3-chloropropane	20.7	1.00	20.00	0	104	54.8	147				
Hexachloro-1,3-butadiene	21.7	4.00	20.00	0	108	73.6	134				
1,2,3-Trichlorobenzene	21.5	4.00	20.00	0	107	57.1	150				
Surr: Dibromofluoromethane	25.4		25.00		102	81.1	118				
Surr: Toluene-d8	24.8		25.00		99.4	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.4		25.00		102	84.2	111				

Sample ID: **LCSD-28248** SampType: **LCSD** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **LCSW02** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179491**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	15.8	1.00	20.00	0	78.9	14.5	175	16.36	3.58	20	
Chloromethane	17.4	2.00	20.00	0	87.0	44.8	153	17.48	0.390	20	
Vinyl chloride	18.4	0.200	20.00	0	92.0	64.1	131	19.03	3.34	20	
Bromomethane	18.3	1.00	20.00	0	91.6	34.2	171	19.58	6.71	20	
Trichlorofluoromethane (CFC-11)	19.2	1.00	20.00	0	96.2	77.4	121	19.95	3.64	20	
Chloroethane	18.8	1.00	20.00	0	94.0	73.3	123	19.61	4.18	20	
1,1-Dichloroethene	19.3	1.00	20.00	0	96.6	81.8	116	20.14	4.21	20	
Acetone	52.5	5.00	50.00	0	105	47.6	157	49.20	6.57	20	
Methylene chloride	19.5	1.00	20.00	0	97.7	80.4	116	19.72	0.851	20	
trans-1,2-Dichloroethene	19.5	1.00	20.00	0	97.5	83.1	115	20.02	2.62	20	

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-28248** SampType: **LCSD** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **LCSW02** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179491**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	19.4	1.00	20.00	0	97.1	79.5	119	19.81	1.96	20	
cis-1,2-Dichloroethene	19.4	1.00	20.00	0	97.2	83.5	115	20.11	3.42	20	
Chloroform	19.5	1.00	20.00	0	97.7	81	117	20.20	3.34	20	
1,1,1-Trichloroethane (TCA)	19.5	1.00	20.00	0	97.5	82.8	116	20.21	3.52	20	
1,1-Dichloropropene	19.4	1.00	20.00	0	97.0	81.5	117	19.95	2.79	20	
Carbon tetrachloride	19.3	1.00	20.00	0	96.5	83.3	114	20.07	3.88	20	
1,2-Dichloroethane (EDC)	19.5	1.00	20.00	0	97.6	78.4	118	20.04	2.67	20	
Trichloroethene (TCE)	19.3	0.500	20.00	0	96.5	82.2	116	20.27	4.93	20	
1,2-Dichloropropane	19.4	1.00	20.00	0	96.9	78	120	19.94	2.84	20	
Bromodichloromethane	19.1	1.00	20.00	0	95.5	80.9	116	19.73	3.26	20	
Dibromomethane	19.6	1.00	20.00	0	98.2	80	117	20.31	3.35	20	
cis-1,3-Dichloropropene	19.9	1.00	20.00	0	99.6	79.8	118	20.37	2.21	20	
trans-1,3-Dichloropropylene	20.0	1.00	20.00	0	100	75.8	122	20.53	2.61	20	
1,1,2-Trichloroethane	20.3	1.00	20.00	0	101	77.8	120	20.57	1.51	20	
1,3-Dichloropropane	20.1	1.00	20.00	0	100	76.5	121	20.50	2.11	20	
Tetrachloroethene (PCE)	19.8	1.00	20.00	0	99.1	86.2	114	20.76	4.61	20	
Dibromochloromethane	19.9	1.00	20.00	0	99.6	78	117	20.28	1.83	20	
1,2-Dibromoethane (EDB)	20.3	0.250	20.00	0	101	76.8	120	20.59	1.45	20	
Chlorobenzene	19.7	1.00	20.00	0	98.3	85.2	112	20.03	1.88	20	
1,1,1,2-Tetrachloroethane	19.4	1.00	20.00	0	97.2	85.5	110	20.02	2.92	20	
Bromoform	19.9	2.00	20.00	0	99.6	73.4	119	19.84	0.432	20	
1,1,2,2-Tetrachloroethane	20.5	1.00	20.00	0	102	74.8	124	20.64	0.717	20	
Bromobenzene	19.6	1.00	20.00	0	98.2	83.2	116	19.80	0.790	20	
2-Chlorotoluene	19.5	1.00	20.00	0	97.7	81.8	119	20.03	2.46	20	
4-Chlorotoluene	19.3	1.00	20.00	0	96.6	81.6	118	19.89	2.86	20	
1,2,3-Trichloropropane	20.0	1.00	20.00	0	100	73.2	126	20.19	0.923	20	
1,2,4-Trichlorobenzene	20.8	2.00	20.00	0	104	68.7	138	21.13	1.34	20	
1,3-Dichlorobenzene	20.4	1.00	20.00	0	102	90.7	114	20.86	2.43	20	
1,4-Dichlorobenzene	20.4	1.00	20.00	0	102	90.1	114	20.78	1.72	20	
1,2-Dichlorobenzene	20.8	1.00	20.00	0	104	90.1	115	20.95	0.834	20	
1,2-Dibromo-3-chloropropane	20.5	1.00	20.00	0	103	54.8	147	20.72	1.07	20	

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-28248**	SampType: **LCSD**	Units: **µg/L**	Prep Date: **5/6/2020**	RunNo: **59035**
Client ID: **LCSW02**	Batch ID: **28248**		Analysis Date: **5/6/2020**	SeqNo: **1179491**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	21.6	4.00	20.00	0	108	73.6	134	21.68	0.556	20	
1,2,3-Trichlorobenzene	21.7	4.00	20.00	0	109	57.1	150	21.46	1.18	20	
Surr: Dibromofluoromethane	25.1		25.00		101	81.1	118		0		
Surr: Toluene-d8	24.6		25.00		98.5	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	84.2	111		0		

Sample ID: **MB-28248**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **5/6/2020**	RunNo: **59035**
Client ID: **MBLKW**	Batch ID: **28248**		Analysis Date: **5/6/2020**	SeqNo: **1179492**

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									Q
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Acetone	ND	5.00									
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									

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28248** SampType: **MBLK** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **MBLKW** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179492**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Bromoform	ND	2.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
Bromobenzene	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	24.1		25.00		96.5	81.1	118				
Surr: Toluene-d8	24.9		25.00		99.4	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	24.4		25.00		97.7	84.2	111				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005033-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **BATCH** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179480**

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	Q
Vinyl chloride	0.776	0.200						0.7550	2.69	30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	29.2	5.00						31.06	6.12	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	
Dibromomethane	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	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005033-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **BATCH** Batch ID: **28248** Analysis Date: **5/6/2020** SeqNo: **1179480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
Bromobenzene	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	25.3		25.00		101	81.1	118		0		
Surr: Toluene-d8	24.7		25.00		98.8	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.5		25.00		98.2	84.2	111		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2004412-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **BATCH** Batch ID: **28248** Analysis Date: **5/7/2020** SeqNo: **1179467**

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	Q
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2004412-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **BATCH** Batch ID: **28248** Analysis Date: **5/7/2020** SeqNo: **1179467**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	
Dibromomethane	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	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
Bromobenzene	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	

Work Order: 2004413
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2004412-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/6/2020** RunNo: **59035**
Client ID: **BATCH** Batch ID: **28248** Analysis Date: **5/7/2020** SeqNo: **1179467**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	81.1	118		0		
Surr: Toluene-d8	24.5		25.00		98.1	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.6		25.00		98.3	84.2	111		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Log-In Check List

Client Name:	**ONEILL**	Work Order Number:	**2004413**
Logged by:	**Carissa True**	Date Received:	**4/29/2020 4:24:00 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 >2°C to 6°C *	Yes ☐	No ☑	NA ☐

Samples were collected the same day and chilled.

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 1	1.8
Sample 1	13.9
Temp Blank 1	12.1

* 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: 4/21/20 | Page: 1 of: 1 | Laboratory Project No (internal): 2004113

Project Name: FL00

Project No: 8021

Collected by: Atkins

Location: FL358

Report To (PM): Atkins

Special Remarks:

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

Client: OSG

Address:

City, State, Zip:

Telephone:

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	FL358-MW4	4/20/20	1007		X												
2	UPGRADIENT-MW3		1040														
3	FL358-MW3		1125														
4	FL358-MW2		1205														
5	FL358-MW1		1240														
6	TRIP BLANK		—		X												
7																	
8																	
9																	
10																	

*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

Turn-around Time:

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

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 [signature]	4/21/20 1510	x [signature]	4/21/20 1624
Relinquished	Date/Time	Received	Date/Time
x		x	

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

O'Neill Service Group
Vance Atkins
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: F200
Work Order Number: 2005069

May 20, 2020

Attention Vance Atkins:

Fremont Analytical, Inc. received 19 sample(s) on 5/8/2020 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: *05/20/2020*

CLIENT: O'Neill Service Group
Project: F200
Work Order: 2005069

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2005069-001	358-B1-2.5	05/07/2020 9:25 AM	05/08/2020 8:15 AM
2005069-002	358-B1-5	05/07/2020 9:30 AM	05/08/2020 8:15 AM
2005069-003	358-B1-7.5	05/07/2020 10:00 AM	05/08/2020 8:15 AM
2005069-004	358-B1-10	05/07/2020 10:10 AM	05/08/2020 8:15 AM
2005069-005	358-B1-15	05/07/2020 10:20 AM	05/08/2020 8:15 AM
2005069-006	358-B1-20	05/07/2020 10:40 AM	05/08/2020 8:15 AM
2005069-007	358-B1-25	05/07/2020 10:50 AM	05/08/2020 8:15 AM
2005069-008	358-B2-5	05/07/2020 12:00 PM	05/08/2020 8:15 AM
2005069-009	358-B2-12.5	05/07/2020 12:10 PM	05/08/2020 8:15 AM
2005069-010	358-B2-15	05/07/2020 12:15 PM	05/08/2020 8:15 AM
2005069-011	358-B2-20	05/07/2020 12:20 PM	05/08/2020 8:15 AM
2005069-012	358-B2-25	05/07/2020 12:30 PM	05/08/2020 8:15 AM
2005069-013	358-B3-5	05/07/2020 2:25 PM	05/08/2020 8:15 AM
2005069-014	358-B3-7.5	05/07/2020 2:30 PM	05/08/2020 8:15 AM
2005069-015	358-B3-10	05/07/2020 2:35 PM	05/08/2020 8:15 AM
2005069-016	358-B3-12.5	05/07/2020 2:40 PM	05/08/2020 8:15 AM
2005069-017	358-B3-15	05/07/2020 2:45 PM	05/08/2020 8:15 AM
2005069-018	358-B3-20	05/07/2020 3:00 PM	05/08/2020 8:15 AM
2005069-019	Trip Blank	05/06/2020 12:40 PM	05/08/2020 8:15 AM

Case Narrative

WO#: **2005069**
Date: **5/20/2020**

CLIENT: O'Neill Service Group
Project: F200

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.

5/20/20: Revision 1 includes additional analysis requested by client.

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: O'Neill Service Group **Collection Date:** 5/7/2020 10:10:00 AM
Project: F200
Lab ID: 2005069-004 **Matrix:** Soil
Client Sample ID: **358-B1-10**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Chloromethane	ND	0.0560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Vinyl chloride	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Bromomethane	ND	0.0560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Trichlorofluoromethane (CFC-11)	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Chloroethane	ND	0.0560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1-Dichloroethene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Methylene chloride	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
trans-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1-Dichloroethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
cis-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Chloroform	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1,1-Trichloroethane (TCA)	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1-Dichloropropene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Carbon tetrachloride	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2-Dichloroethane (EDC)	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Trichloroethene (TCE)	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2-Dichloropropane	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Bromodichloromethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Dibromomethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
cis-1,3-Dichloropropene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
trans-1,3-Dichloropropylene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1,2-Trichloroethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,3-Dichloropropane	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Tetrachloroethene (PCE)	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Dibromochloromethane	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2-Dibromoethane (EDB)	ND	0.00560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Chlorobenzene	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1,1,2-Tetrachloroethane	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Bromoform	ND	0.0560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,1,2,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Bromobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
2-Chlorotoluene	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
4-Chlorotoluene	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2,3-Trichloropropane	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2,4-Trichlorobenzene	ND	0.0280		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,3-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,4-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 10:10:00 AM
Project: F200
Lab ID: 2005069-004
Matrix: Soil
Client Sample ID: **358-B1-10**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Hexachloro-1,3-butadiene	ND	0.0560		mg/Kg-dry	1	5/11/2020 9:55:46 PM
1,2,3-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 9:55:46 PM
Surr: Dibromofluoromethane	96.1	80 - 116		%Rec	1	5/11/2020 9:55:46 PM
Surr: Toluene-d8	101	84.8 - 113		%Rec	1	5/11/2020 9:55:46 PM
Surr: 1-Bromo-4-fluorobenzene	96.2	82.8 - 113		%Rec	1	5/11/2020 9:55:46 PM
Sample Moisture (Percent Moisture)				Batch ID: R59095		Analyst: EH
Percent Moisture	15.0	0.500		wt%	1	5/11/2020 11:01:24 AM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 10:40:00 AM
Project: F200
Lab ID: 2005069-006 **Matrix:** Soil
Client Sample ID: **358-B1-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Chloromethane	ND	0.0447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Vinyl chloride	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Bromomethane	ND	0.0447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Trichlorofluoromethane (CFC-11)	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Chloroethane	ND	0.0447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1-Dichloroethene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Methylene chloride	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
trans-1,2-Dichloroethene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1-Dichloroethane	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
cis-1,2-Dichloroethene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Chloroform	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1,1-Trichloroethane (TCA)	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1-Dichloropropene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Carbon tetrachloride	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2-Dichloroethane (EDC)	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Trichloroethene (TCE)	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2-Dichloropropane	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Bromodichloromethane	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Dibromomethane	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
cis-1,3-Dichloropropene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
trans-1,3-Dichloropropylene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1,2-Trichloroethane	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,3-Dichloropropane	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Tetrachloroethene (PCE)	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Dibromochloromethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2-Dibromoethane (EDB)	ND	0.00447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Chlorobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1,1,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Bromoform	ND	0.0447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,1,2,2-Tetrachloroethane	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Bromobenzene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
2-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
4-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2,3-Trichloropropane	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2,4-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,3-Dichlorobenzene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,4-Dichlorobenzene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2-Dichlorobenzene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 10:40:00 AM
Project: F200
Lab ID: 2005069-006
Matrix: Soil
Client Sample ID: **358-B1-20**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Hexachloro-1,3-butadiene	ND	0.0447		mg/Kg-dry	1	5/11/2020 10:25:53 PM
1,2,3-Trichlorobenzene	ND	0.0179		mg/Kg-dry	1	5/11/2020 10:25:53 PM
Surr: Dibromofluoromethane	96.9	80 - 116		%Rec	1	5/11/2020 10:25:53 PM
Surr: Toluene-d8	102	84.8 - 113		%Rec	1	5/11/2020 10:25:53 PM
Surr: 1-Bromo-4-fluorobenzene	96.1	82.8 - 113		%Rec	1	5/11/2020 10:25:53 PM
Sample Moisture (Percent Moisture)				Batch ID: R59095		Analyst: EH
Percent Moisture	6.75	0.500		wt%	1	5/11/2020 11:01:24 AM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 12:10:00 PM
Project: F200
Lab ID: 2005069-009 **Matrix:** Soil
Client Sample ID: **358-B2-12.5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Chloromethane	ND	0.0633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Vinyl chloride	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Bromomethane	ND	0.0633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Trichlorofluoromethane (CFC-11)	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Chloroethane	ND	0.0633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1-Dichloroethene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Methylene chloride	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
trans-1,2-Dichloroethene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1-Dichloroethane	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
cis-1,2-Dichloroethene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Chloroform	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1,1-Trichloroethane (TCA)	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1-Dichloropropene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Carbon tetrachloride	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2-Dichloroethane (EDC)	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Trichloroethene (TCE)	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2-Dichloropropane	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Bromodichloromethane	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Dibromomethane	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
cis-1,3-Dichloropropene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
trans-1,3-Dichloropropylene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1,2-Trichloroethane	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,3-Dichloropropane	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Tetrachloroethene (PCE)	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Dibromochloromethane	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2-Dibromoethane (EDB)	ND	0.00633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Chlorobenzene	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1,1,2-Tetrachloroethane	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Bromoform	ND	0.0633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,1,2,2-Tetrachloroethane	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Bromobenzene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
2-Chlorotoluene	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
4-Chlorotoluene	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2,3-Trichloropropane	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2,4-Trichlorobenzene	ND	0.0317		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,3-Dichlorobenzene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,4-Dichlorobenzene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2-Dichlorobenzene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 12:10:00 PM
Project: F200
Lab ID: 2005069-009
Matrix: Soil
Client Sample ID: **358-B2-12.5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Hexachloro-1,3-butadiene	ND	0.0633		mg/Kg-dry	1	5/11/2020 10:56:02 PM
1,2,3-Trichlorobenzene	ND	0.0253		mg/Kg-dry	1	5/11/2020 10:56:02 PM
Surr: Dibromofluoromethane	98.7	80 - 116		%Rec	1	5/11/2020 10:56:02 PM
Surr: Toluene-d8	102	84.8 - 113		%Rec	1	5/11/2020 10:56:02 PM
Surr: 1-Bromo-4-fluorobenzene	99.0	82.8 - 113		%Rec	1	5/11/2020 10:56:02 PM
Sample Moisture (Percent Moisture)				Batch ID: R59095		Analyst: EH
Percent Moisture	13.5	0.500		wt%	1	5/11/2020 11:01:24 AM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 12:30:00 PM
Project: F200
Lab ID: 2005069-012 **Matrix:** Soil
Client Sample ID: **358-B2-25**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Chloromethane	ND	0.0594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Vinyl chloride	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Bromomethane	ND	0.0594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Trichlorofluoromethane (CFC-11)	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Chloroethane	ND	0.0594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1-Dichloroethene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Methylene chloride	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
trans-1,2-Dichloroethene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1-Dichloroethane	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
cis-1,2-Dichloroethene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Chloroform	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1,1-Trichloroethane (TCA)	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1-Dichloropropene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Carbon tetrachloride	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2-Dichloroethane (EDC)	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Trichloroethene (TCE)	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2-Dichloropropane	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Bromodichloromethane	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Dibromomethane	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
cis-1,3-Dichloropropene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
trans-1,3-Dichloropropylene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1,2-Trichloroethane	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,3-Dichloropropane	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Tetrachloroethene (PCE)	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Dibromochloromethane	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2-Dibromoethane (EDB)	ND	0.00594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Chlorobenzene	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1,1,2-Tetrachloroethane	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Bromoform	ND	0.0594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,1,2,2-Tetrachloroethane	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Bromobenzene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
2-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
4-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2,3-Trichloropropane	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2,4-Trichlorobenzene	ND	0.0297		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,3-Dichlorobenzene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,4-Dichlorobenzene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2-Dichlorobenzene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 12:30:00 PM
Project: F200
Lab ID: 2005069-012
Matrix: Soil
Client Sample ID: **358-B2-25**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Hexachloro-1,3-butadiene	ND	0.0594		mg/Kg-dry	1	5/11/2020 11:56:18 PM
1,2,3-Trichlorobenzene	ND	0.0238		mg/Kg-dry	1	5/11/2020 11:56:18 PM
Surr: Dibromofluoromethane	95.9	80 - 116		%Rec	1	5/11/2020 11:56:18 PM
Surr: Toluene-d8	100	84.8 - 113		%Rec	1	5/11/2020 11:56:18 PM
Surr: 1-Bromo-4-fluorobenzene	96.9	82.8 - 113		%Rec	1	5/11/2020 11:56:18 PM
Sample Moisture (Percent Moisture)				Batch ID: R59095		Analyst: EH
Percent Moisture	17.0	0.500		wt%	1	5/11/2020 11:01:24 AM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 2:35:00 PM
Project: F200
Lab ID: 2005069-015 **Matrix:** Soil
Client Sample ID: **358-B3-10**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28369 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Chloromethane	ND	0.0509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Vinyl chloride	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Bromomethane	ND	0.0509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Chloroethane	ND	0.0509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1-Dichloroethene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Methylene chloride	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
trans-1,2-Dichloroethene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1-Dichloroethane	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
cis-1,2-Dichloroethene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Chloroform	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1-Dichloropropene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Carbon tetrachloride	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2-Dichloroethane (EDC)	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Trichloroethene (TCE)	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2-Dichloropropane	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Bromodichloromethane	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Dibromomethane	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
cis-1,3-Dichloropropene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
trans-1,3-Dichloropropylene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1,2-Trichloroethane	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,3-Dichloropropane	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Tetrachloroethene (PCE)	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Dibromochloromethane	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2-Dibromoethane (EDB)	ND	0.00509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Chlorobenzene	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1,1,2-Tetrachloroethane	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Bromoform	ND	0.0509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,1,2,2-Tetrachloroethane	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Bromobenzene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
2-Chlorotoluene	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
4-Chlorotoluene	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2,3-Trichloropropane	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2,4-Trichlorobenzene	ND	0.0254		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,3-Dichlorobenzene	ND	0.0204	*	mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,4-Dichlorobenzene	ND	0.0204	*	mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2-Dichlorobenzene	ND	0.0204	*	mg/Kg-dry	1	5/20/2020 7:16:07 AM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 2:35:00 PM
Project: F200
Lab ID: 2005069-015
Matrix: Soil
Client Sample ID: **358-B3-10**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28369		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Hexachloro-1,3-butadiene	ND	0.0509		mg/Kg-dry	1	5/20/2020 7:16:07 AM
1,2,3-Trichlorobenzene	ND	0.0204		mg/Kg-dry	1	5/20/2020 7:16:07 AM
Surr: Dibromofluoromethane	98.1	80 - 116		%Rec	1	5/20/2020 7:16:07 AM
Surr: Toluene-d8	102	84.8 - 113		%Rec	1	5/20/2020 7:16:07 AM
Surr: 1-Bromo-4-fluorobenzene	100	82.8 - 113		%Rec	1	5/20/2020 7:16:07 AM

NOTES:
* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)				Batch ID: R59252		Analyst: EH
Percent Moisture	14.9	0.500		wt%	1	5/19/2020 12:14:02 PM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 2:40:00 PM
Project: F200
Lab ID: 2005069-016 **Matrix:** Soil
Client Sample ID: **358-B3-12.5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Chloromethane	ND	0.0489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Vinyl chloride	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Bromomethane	ND	0.0489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Trichlorofluoromethane (CFC-11)	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Chloroethane	ND	0.0489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1-Dichloroethene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Methylene chloride	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
trans-1,2-Dichloroethene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1-Dichloroethane	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
cis-1,2-Dichloroethene	0.0235	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Chloroform	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1,1-Trichloroethane (TCA)	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1-Dichloropropene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Carbon tetrachloride	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2-Dichloroethane (EDC)	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Trichloroethene (TCE)	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2-Dichloropropane	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Bromodichloromethane	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Dibromomethane	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
cis-1,3-Dichloropropene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
trans-1,3-Dichloropropylene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1,2-Trichloroethane	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,3-Dichloropropane	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Tetrachloroethene (PCE)	0.0830	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Dibromochloromethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2-Dibromoethane (EDB)	ND	0.00489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Chlorobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1,1,2-Tetrachloroethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Bromoform	ND	0.0489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,1,2,2-Tetrachloroethane	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Bromobenzene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
2-Chlorotoluene	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
4-Chlorotoluene	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2,3-Trichloropropane	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2,4-Trichlorobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,3-Dichlorobenzene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,4-Dichlorobenzene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2-Dichlorobenzene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 2:40:00 PM
Project: F200
Lab ID: 2005069-016 **Matrix:** Soil
Client Sample ID: **358-B3-12.5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Hexachloro-1,3-butadiene	ND	0.0489		mg/Kg-dry	1	5/12/2020 12:26:28 AM
1,2,3-Trichlorobenzene	ND	0.0196		mg/Kg-dry	1	5/12/2020 12:26:28 AM
Surr: Dibromofluoromethane	93.9	80 - 116		%Rec	1	5/12/2020 12:26:28 AM
Surr: Toluene-d8	99.7	84.8 - 113		%Rec	1	5/12/2020 12:26:28 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	82.8 - 113		%Rec	1	5/12/2020 12:26:28 AM
Sample Moisture (Percent Moisture)				Batch ID: R59095		Analyst: EH
Percent Moisture	18.5	0.500		wt%	1	5/11/2020 11:01:24 AM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 2:45:00 PM
Project: F200
Lab ID: 2005069-017 **Matrix:** Soil
Client Sample ID: **358-B3-15**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28369 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Chloromethane	ND	0.0427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Vinyl chloride	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Bromomethane	ND	0.0427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Trichlorofluoromethane (CFC-11)	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Chloroethane	ND	0.0427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1-Dichloroethene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Methylene chloride	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
trans-1,2-Dichloroethene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1-Dichloroethane	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
cis-1,2-Dichloroethene	0.0669	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Chloroform	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1,1-Trichloroethane (TCA)	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1-Dichloropropene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Carbon tetrachloride	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2-Dichloroethane (EDC)	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Trichloroethene (TCE)	0.0379	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2-Dichloropropane	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Bromodichloromethane	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Dibromomethane	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
cis-1,3-Dichloropropene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
trans-1,3-Dichloropropylene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1,2-Trichloroethane	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,3-Dichloropropane	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Tetrachloroethene (PCE)	0.121	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Dibromochloromethane	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2-Dibromoethane (EDB)	ND	0.00427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Chlorobenzene	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1,1,2-Tetrachloroethane	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Bromoform	ND	0.0427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,1,2,2-Tetrachloroethane	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Bromobenzene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
2-Chlorotoluene	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
4-Chlorotoluene	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2,3-Trichloropropane	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2,4-Trichlorobenzene	ND	0.0214		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,3-Dichlorobenzene	ND	0.0171	*	mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,4-Dichlorobenzene	ND	0.0171	*	mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2-Dichlorobenzene	ND	0.0171	*	mg/Kg-dry	1	5/20/2020 7:46:16 AM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 2:45:00 PM
Project: F200
Lab ID: 2005069-017
Matrix: Soil
Client Sample ID: **358-B3-15**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28369		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Hexachloro-1,3-butadiene	ND	0.0427		mg/Kg-dry	1	5/20/2020 7:46:16 AM
1,2,3-Trichlorobenzene	ND	0.0171		mg/Kg-dry	1	5/20/2020 7:46:16 AM
Surr: Dibromofluoromethane	101	80 - 116		%Rec	1	5/20/2020 7:46:16 AM
Surr: Toluene-d8	101	84.8 - 113		%Rec	1	5/20/2020 7:46:16 AM
Surr: 1-Bromo-4-fluorobenzene	98.0	82.8 - 113		%Rec	1	5/20/2020 7:46:16 AM

NOTES:
* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)				Batch ID: R59252		Analyst: EH
Percent Moisture	6.64	0.500		wt%	1	5/19/2020 12:14:02 PM

Client: O'Neill Service Group **Collection Date:** 5/7/2020 3:00:00 PM
Project: F200
Lab ID: 2005069-018 **Matrix:** Soil
Client Sample ID: **358-B3-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Chloromethane	ND	0.0472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Vinyl chloride	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Bromomethane	ND	0.0472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Trichlorofluoromethane (CFC-11)	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Chloroethane	ND	0.0472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1-Dichloroethene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Methylene chloride	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
trans-1,2-Dichloroethene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1-Dichloroethane	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
cis-1,2-Dichloroethene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Chloroform	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1,1-Trichloroethane (TCA)	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1-Dichloropropene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Carbon tetrachloride	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2-Dichloroethane (EDC)	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Trichloroethene (TCE)	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2-Dichloropropane	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Bromodichloromethane	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Dibromomethane	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
cis-1,3-Dichloropropene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
trans-1,3-Dichloropropylene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1,2-Trichloroethane	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,3-Dichloropropane	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Tetrachloroethene (PCE)	0.0384	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Dibromochloromethane	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2-Dibromoethane (EDB)	ND	0.00472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Chlorobenzene	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1,1,2-Tetrachloroethane	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Bromoform	ND	0.0472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,1,2,2-Tetrachloroethane	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Bromobenzene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
2-Chlorotoluene	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
4-Chlorotoluene	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2,3-Trichloropropane	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2,4-Trichlorobenzene	ND	0.0236		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,3-Dichlorobenzene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,4-Dichlorobenzene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2-Dichlorobenzene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/7/2020 3:00:00 PM
Project: F200
Lab ID: 2005069-018
Matrix: Soil
Client Sample ID: **358-B3-20**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Hexachloro-1,3-butadiene	ND	0.0472		mg/Kg-dry	1	5/12/2020 12:56:35 AM
1,2,3-Trichlorobenzene	ND	0.0189		mg/Kg-dry	1	5/12/2020 12:56:35 AM
Surr: Dibromofluoromethane	93.5	80 - 116		%Rec	1	5/12/2020 12:56:35 AM
Surr: Toluene-d8	98.7	84.8 - 113		%Rec	1	5/12/2020 12:56:35 AM
Surr: 1-Bromo-4-fluorobenzene	94.8	82.8 - 113		%Rec	1	5/12/2020 12:56:35 AM
Sample Moisture (Percent Moisture)				Batch ID: R59095		Analyst: EH
Percent Moisture	7.74	0.500		wt%	1	5/11/2020 11:01:24 AM

Client: O'Neill Service Group
Collection Date: 5/6/2020 12:40:00 PM
Project: F200
Lab ID: 2005069-019
Matrix: Soil
Client Sample ID: **Trip Blank**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28293 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Chloromethane	ND	0.0500		mg/Kg	1	5/11/2020 4:25:47 PM
Vinyl chloride	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
Bromomethane	ND	0.0500		mg/Kg	1	5/11/2020 4:25:47 PM
Trichlorofluoromethane (CFC-11)	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Chloroethane	ND	0.0500		mg/Kg	1	5/11/2020 4:25:47 PM
1,1-Dichloroethene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Methylene chloride	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,1-Dichloroethane	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Chloroform	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,1,1-Trichloroethane (TCA)	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,1-Dichloropropene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Carbon tetrachloride	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,2-Dichloroethane (EDC)	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Trichloroethene (TCE)	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,2-Dichloropropane	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Bromodichloromethane	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Dibromomethane	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
trans-1,3-Dichloropropylene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,1,2-Trichloroethane	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,3-Dichloropropane	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
Tetrachloroethene (PCE)	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
Dibromochloromethane	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,2-Dibromoethane (EDB)	ND	0.00500		mg/Kg	1	5/11/2020 4:25:47 PM
Chlorobenzene	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,1,1,2-Tetrachloroethane	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
Bromoform	ND	0.0500		mg/Kg	1	5/11/2020 4:25:47 PM
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Bromobenzene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
2-Chlorotoluene	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
4-Chlorotoluene	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,2,3-Trichloropropane	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,2,4-Trichlorobenzene	ND	0.0250		mg/Kg	1	5/11/2020 4:25:47 PM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM

Analytical Report

Work Order: **2005069**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/6/2020 12:40:00 PM
Project: F200
Lab ID: 2005069-019
Matrix: Soil
Client Sample ID: **Trip Blank**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28293		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	0.500		mg/Kg	1	5/11/2020 4:25:47 PM
Hexachloro-1,3-butadiene	ND	0.0500		mg/Kg	1	5/11/2020 4:25:47 PM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg	1	5/11/2020 4:25:47 PM
Surr: Dibromofluoromethane	95.0	80 - 116		%Rec	1	5/11/2020 4:25:47 PM
Surr: Toluene-d8	99.4	84.8 - 113		%Rec	1	5/11/2020 4:25:47 PM
Surr: 1-Bromo-4-fluorobenzene	97.5	82.8 - 113		%Rec	1	5/11/2020 4:25:47 PM

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28369** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **LCSS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184677**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.945	0.0200	1.000	0	94.5	21.6	169				
Chloromethane	0.944	0.0500	1.000	0	94.4	45.3	153				
Vinyl chloride	0.929	0.0250	1.000	0	92.9	57.5	137				
Bromomethane	0.918	0.0500	1.000	0	91.8	32.8	194				
Trichlorofluoromethane (CFC-11)	0.957	0.0200	1.000	0	95.7	54.3	152				
Chloroethane	0.954	0.0500	1.000	0	95.4	52	146				
1,1-Dichloroethene	0.941	0.0200	1.000	0	94.1	62.8	139				
Methylene chloride	0.952	0.0200	1.000	0	95.2	78.4	118				
trans-1,2-Dichloroethene	0.954	0.0200	1.000	0	95.4	82	117				
1,1-Dichloroethane	0.959	0.0200	1.000	0	95.9	78	119				
cis-1,2-Dichloroethene	0.978	0.0200	1.000	0	97.8	81.9	116				
Chloroform	0.960	0.0200	1.000	0	96.0	80.8	117				
1,1,1-Trichloroethane (TCA)	0.962	0.0250	1.000	0	96.2	81.4	117				
1,1-Dichloropropene	0.952	0.0200	1.000	0	95.2	79.9	117				
Carbon tetrachloride	0.944	0.0500	1.000	0	94.4	80.4	117				
1,2-Dichloroethane (EDC)	0.969	0.0200	1.000	0	96.9	77.5	117				
Trichloroethene (TCE)	0.944	0.0200	1.000	0	94.4	83.4	115				
1,2-Dichloropropane	0.959	0.0200	1.000	0	95.9	77.6	117				
Bromodichloromethane	0.952	0.0200	1.000	0	95.2	78.9	116				
Dibromomethane	0.972	0.0200	1.000	0	97.2	81.2	115				
cis-1,3-Dichloropropene	0.963	0.0200	1.000	0	96.3	78	115				
trans-1,3-Dichloropropylene	0.955	0.0200	1.000	0	95.5	75.7	117				
1,1,2-Trichloroethane	0.948	0.0200	1.000	0	94.8	77.9	118				
1,3-Dichloropropane	0.943	0.0250	1.000	0	94.3	77.1	118				
Tetrachloroethene (PCE)	0.937	0.0250	1.000	0	93.7	84.3	117				
Dibromochloromethane	0.951	0.0250	1.000	0	95.1	77.9	118				
1,2-Dibromoethane (EDB)	0.953	0.00500	1.000	0	95.3	78.6	117				
Chlorobenzene	0.946	0.0250	1.000	0	94.6	86.5	113				
1,1,1,2-Tetrachloroethane	0.920	0.0250	1.000	0	92.0	84.8	113				

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28369** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **LCSS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184677**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.922	0.0500	1.000	0	92.2	70.7	125				
1,1,2,2-Tetrachloroethane	0.927	0.0200	1.000	0	92.7	68.3	125				
Bromobenzene	0.963	0.0200	1.000	0	96.3	84	117				
2-Chlorotoluene	0.966	0.0250	1.000	0	96.6	80.4	122				
4-Chlorotoluene	0.969	0.0250	1.000	0	96.9	83.1	118				
1,2,3-Trichloropropane	0.954	0.0250	1.000	0	95.4	71	125				
1,2,4-Trichlorobenzene	0.956	0.0250	1.000	0	95.6	81	126				
1,3-Dichlorobenzene	0.890	0.0200	1.000	0	89.0	90.4	115				S
1,4-Dichlorobenzene	0.875	0.0200	1.000	0	87.5	90.3	115				S
1,2-Dichlorobenzene	0.884	0.0200	1.000	0	88.4	90.3	115				S
1,2-Dibromo-3-chloropropane	0.953	0.500	1.000	0	95.3	62.3	136				
Hexachloro-1,3-butadiene	1.01	0.0500	1.000	0	101	77.8	133				
1,2,3-Trichlorobenzene	0.932	0.0200	1.000	0	93.2	75.9	130				
Surr: Dibromofluoromethane	1.35		1.250		108	80	116				
Surr: Toluene-d8	1.26		1.250		101	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.30		1.250		104	82.8	113				

NOTES:
S - Outlying spike recovery observed (low bias). Samples will be qualified with a *.

Sample ID: **MB-28369** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **MBLKS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184678**

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									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28369** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **MBLKS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
Bromobenzene	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									

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28369** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **MBLKS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	1.22		1.250		97.4	80	116				
Surr: Toluene-d8	1.26		1.250		101	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.4	82.8	113				

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2005069-017BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **358-B3-15** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184667**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0171						0		30	
Chloromethane	ND	0.0427						0		30	
Vinyl chloride	ND	0.0214						0		30	
Bromomethane	ND	0.0427						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0171						0		30	
Chloroethane	ND	0.0427						0		30	
1,1-Dichloroethene	ND	0.0171						0		30	
Methylene chloride	ND	0.0171						0		30	
trans-1,2-Dichloroethene	ND	0.0171						0		30	
1,1-Dichloroethane	ND	0.0171						0		30	
cis-1,2-Dichloroethene	0.0653	0.0171						0.06688	2.35	30	
Chloroform	ND	0.0171						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0214						0		30	
1,1-Dichloropropene	ND	0.0171						0		30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-017BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **358-B3-15** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184667**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	ND	0.0427						0		30	
1,2-Dichloroethane (EDC)	ND	0.0171						0		30	
Trichloroethene (TCE)	0.0378	0.0171						0.03793	0.371	30	
1,2-Dichloropropane	ND	0.0171						0		30	
Bromodichloromethane	ND	0.0171						0		30	
Dibromomethane	ND	0.0171						0		30	
cis-1,3-Dichloropropene	ND	0.0171						0		30	
trans-1,3-Dichloropropylene	ND	0.0171						0		30	
1,1,2-Trichloroethane	ND	0.0171						0		30	
1,3-Dichloropropane	ND	0.0214						0		30	
Tetrachloroethene (PCE)	0.115	0.0214						0.1215	5.82	30	
Dibromochloromethane	ND	0.0214						0		30	
1,2-Dibromoethane (EDB)	ND	0.00427						0		30	
Chlorobenzene	ND	0.0214						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0214						0		30	
Bromoform	ND	0.0427						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0171						0		30	
Bromobenzene	ND	0.0171						0		30	
2-Chlorotoluene	ND	0.0214						0		30	
4-Chlorotoluene	ND	0.0214						0		30	
1,2,3-Trichloropropane	ND	0.0214						0		30	
1,2,4-Trichlorobenzene	ND	0.0214						0		30	
1,3-Dichlorobenzene	ND	0.0171						0		30	*
1,4-Dichlorobenzene	ND	0.0171						0		30	*
1,2-Dichlorobenzene	ND	0.0171						0		30	*
1,2-Dibromo-3-chloropropane	ND	0.427						0		30	
Hexachloro-1,3-butadiene	ND	0.0427						0		30	
1,2,3-Trichlorobenzene	ND	0.0171						0		30	
Surr: Dibromofluoromethane	1.06		1.068		99.1	80	116		0		

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-017BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **358-B3-15** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184667**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	1.07		1.068		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.04		1.068		97.9	82.8	113		0		

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2005214-026BDUP** SampType: **DUP** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184671**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0177						0		30	
Chloromethane	ND	0.0441						0		30	
Vinyl chloride	ND	0.0221						0		30	
Bromomethane	ND	0.0441						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0177						0		30	
Chloroethane	ND	0.0441						0		30	
1,1-Dichloroethene	ND	0.0177						0		30	
Methylene chloride	ND	0.0177						0		30	
trans-1,2-Dichloroethene	ND	0.0177						0		30	
1,1-Dichloroethane	ND	0.0177						0		30	
cis-1,2-Dichloroethene	ND	0.0177						0		30	
Chloroform	ND	0.0177						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0221						0		30	
1,1-Dichloropropene	ND	0.0177						0		30	
Carbon tetrachloride	ND	0.0441						0		30	
1,2-Dichloroethane (EDC)	ND	0.0177						0		30	
Trichloroethene (TCE)	ND	0.0177						0		30	
1,2-Dichloropropane	ND	0.0177						0		30	
Bromodichloromethane	ND	0.0177						0		30	
Dibromomethane	ND	0.0177						0		30	
cis-1,3-Dichloropropene	ND	0.0177						0		30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-026BDUP** SampType: **DUP** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184671**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0177						0		30	
1,1,2-Trichloroethane	ND	0.0177						0		30	
1,3-Dichloropropane	ND	0.0221						0		30	
Tetrachloroethene (PCE)	ND	0.0221						0		30	
Dibromochloromethane	ND	0.0221						0		30	
1,2-Dibromoethane (EDB)	ND	0.00441						0		30	
Chlorobenzene	ND	0.0221						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0221						0		30	
Bromoform	ND	0.0441						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0177						0		30	
Bromobenzene	ND	0.0177						0		30	
2-Chlorotoluene	ND	0.0221						0		30	
4-Chlorotoluene	ND	0.0221						0		30	
1,2,3-Trichloropropane	ND	0.0221						0		30	
1,2,4-Trichlorobenzene	ND	0.0221						0		30	
1,3-Dichlorobenzene	ND	0.0177						0		30	*
1,4-Dichlorobenzene	ND	0.0177						0		30	*
1,2-Dichlorobenzene	ND	0.0177						0		30	*
1,2-Dibromo-3-chloropropane	ND	0.441						0		30	
Hexachloro-1,3-butadiene	ND	0.0441						0		30	
1,2,3-Trichlorobenzene	ND	0.0177						0		30	
Surr: Dibromofluoromethane	1.15		1.104		104	80	116		0		
Surr: Toluene-d8	1.12		1.104		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.09		1.104		98.6	82.8	113		0		

NOTES:
* - Flagged value is not within established control limits.

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMS** SampType: **MS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184673**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.841	0.0186	0.9294	0	90.4	-0.64	180				
Chloromethane	0.882	0.0465	0.9294	0	94.9	33.2	162				
Vinyl chloride	0.884	0.0232	0.9294	0	95.1	47.2	146				
Bromomethane	0.949	0.0465	0.9294	0	102	18.7	226				
Trichlorofluoromethane (CFC-11)	0.847	0.0186	0.9294	0	91.1	48.9	158				
Chloroethane	0.968	0.0465	0.9294	0	104	20.8	195				
1,1-Dichloroethene	0.883	0.0186	0.9294	0	95.0	67.1	135				
Methylene chloride	0.933	0.0186	0.9294	0	100	64.9	137				
trans-1,2-Dichloroethene	0.907	0.0186	0.9294	0	97.5	75.1	126				
1,1-Dichloroethane	0.938	0.0186	0.9294	0	101	68.4	132				
cis-1,2-Dichloroethene	0.989	0.0186	0.9294	0.04170	102	76.2	125				
Chloroform	0.932	0.0186	0.9294	0	100	74.5	127				
1,1,1-Trichloroethane (TCA)	0.898	0.0232	0.9294	0	96.6	74.5	126				
1,1-Dichloropropene	0.885	0.0186	0.9294	0	95.3	70.7	128				
Carbon tetrachloride	0.883	0.0465	0.9294	0	95.0	72.5	126				
1,2-Dichloroethane (EDC)	0.961	0.0186	0.9294	0	103	70.4	128				
Trichloroethene (TCE)	0.910	0.0186	0.9294	0	97.9	64.7	145				
1,2-Dichloropropane	0.940	0.0186	0.9294	0	101	69.3	129				
Bromodichloromethane	0.934	0.0186	0.9294	0	100	75.9	120				
Dibromomethane	0.970	0.0186	0.9294	0	104	78.5	123				
cis-1,3-Dichloropropene	0.878	0.0186	0.9294	0	94.5	67.3	122				
trans-1,3-Dichloropropylene	0.869	0.0186	0.9294	0	93.5	64.4	124				
1,1,2-Trichloroethane	0.927	0.0186	0.9294	0	99.7	72.4	129				
1,3-Dichloropropane	0.945	0.0232	0.9294	0	102	70.5	128				
Tetrachloroethene (PCE)	0.870	0.0232	0.9294	0	93.6	64.9	140				
Dibromochloromethane	0.946	0.0232	0.9294	0	102	71.8	125				
1,2-Dibromoethane (EDB)	0.941	0.00465	0.9294	0	101	73.8	126				
Chlorobenzene	0.902	0.0232	0.9294	0	97.1	85.1	118				
1,1,1,2-Tetrachloroethane	0.885	0.0232	0.9294	0	95.2	82.2	118				

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMS** SampType: **MS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184673**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.881	0.0465	0.9294	0	94.8	66.1	130				
1,1,2,2-Tetrachloroethane	0.933	0.0186	0.9294	0	100	41.2	150				
Bromobenzene	0.904	0.0186	0.9294	0	97.3	84.6	121				
2-Chlorotoluene	0.886	0.0232	0.9294	0	95.3	78.4	128				
4-Chlorotoluene	0.901	0.0232	0.9294	0	97.0	81.2	123				
1,2,3-Trichloropropane	0.975	0.0232	0.9294	0	105	66.4	132				
1,2,4-Trichlorobenzene	0.886	0.0232	0.9294	0	95.3	68.9	139				
1,3-Dichlorobenzene	0.834	0.0186	0.9294	0	89.8	87.8	120				
1,4-Dichlorobenzene	0.828	0.0186	0.9294	0	89.1	88.1	119				
1,2-Dichlorobenzene	0.851	0.0186	0.9294	0	91.6	88.1	120				
1,2-Dibromo-3-chloropropane	0.877	0.465	0.9294	0	94.3	56.6	144				
Hexachloro-1,3-butadiene	0.885	0.0465	0.9294	0	95.2	64.8	148				
1,2,3-Trichlorobenzene	0.889	0.0186	0.9294	0	95.7	59.3	150				
Surr: Dibromofluoromethane	1.27		1.162		109	80	116				
Surr: Toluene-d8	1.19		1.162		102	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.162		103	82.8	113				

Sample ID: **2005214-028BMSD** SampType: **MSD** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184674**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.853	0.0186	0.9294	0	91.8	-0.64	180	0.8406	1.50	30	
Chloromethane	0.920	0.0465	0.9294	0	98.9	33.2	162	0.8824	4.12	30	
Vinyl chloride	0.890	0.0232	0.9294	0	95.8	47.2	146	0.8842	0.660	30	
Bromomethane	0.899	0.0465	0.9294	0	96.8	18.7	226	0.9493	5.39	30	
Trichlorofluoromethane (CFC-11)	0.849	0.0186	0.9294	0	91.3	48.9	158	0.8470	0.203	30	
Chloroethane	1.01	0.0465	0.9294	0	109	20.8	195	0.9683	4.22	30	
1,1-Dichloroethene	0.883	0.0186	0.9294	0	95.0	67.1	135	0.8826	0.0751	30	
Methylene chloride	0.972	0.0186	0.9294	0	105	64.9	137	0.9329	4.13	30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMSD** SampType: **MSD** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184674**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	0.902	0.0186	0.9294	0	97.0	75.1	126	0.9066	0.534	30	
1,1-Dichloroethane	0.942	0.0186	0.9294	0	101	68.4	132	0.9375	0.507	30	
cis-1,2-Dichloroethene	0.969	0.0186	0.9294	0.04170	99.7	76.2	125	0.9893	2.12	30	
Chloroform	0.939	0.0186	0.9294	0	101	74.5	127	0.9322	0.684	30	
1,1,1-Trichloroethane (TCA)	0.899	0.0232	0.9294	0	96.7	74.5	126	0.8982	0.0881	30	
1,1-Dichloropropene	0.863	0.0186	0.9294	0	92.8	70.7	128	0.8854	2.61	30	
Carbon tetrachloride	0.887	0.0465	0.9294	0	95.4	72.5	126	0.8828	0.484	30	
1,2-Dichloroethane (EDC)	0.950	0.0186	0.9294	0	102	70.4	128	0.9614	1.19	30	
Trichloroethene (TCE)	0.902	0.0186	0.9294	0	97.0	64.7	145	0.9100	0.912	30	
1,2-Dichloropropane	0.925	0.0186	0.9294	0	99.5	69.3	129	0.9402	1.65	30	
Bromodichloromethane	0.950	0.0186	0.9294	0	102	75.9	120	0.9338	1.77	30	
Dibromomethane	0.967	0.0186	0.9294	0	104	78.5	123	0.9705	0.399	30	
cis-1,3-Dichloropropene	0.867	0.0186	0.9294	0	93.2	67.3	122	0.8781	1.31	30	
trans-1,3-Dichloropropylene	0.868	0.0186	0.9294	0	93.4	64.4	124	0.8688	0.0743	30	
1,1,2-Trichloroethane	0.933	0.0186	0.9294	0	100	72.4	129	0.9267	0.676	30	
1,3-Dichloropropane	0.934	0.0232	0.9294	0	101	70.5	128	0.9447	1.10	30	
Tetrachloroethene (PCE)	0.860	0.0232	0.9294	0	92.5	64.9	140	0.8700	1.16	30	
Dibromochloromethane	0.945	0.0232	0.9294	0	102	71.8	125	0.9462	0.142	30	
1,2-Dibromoethane (EDB)	0.940	0.00465	0.9294	0	101	73.8	126	0.9408	0.0314	30	
Chlorobenzene	0.907	0.0232	0.9294	0	97.6	85.1	118	0.9023	0.500	30	
1,1,1,2-Tetrachloroethane	0.906	0.0232	0.9294	0	97.5	82.2	118	0.8848	2.35	30	
Bromoform	0.905	0.0465	0.9294	0	97.4	66.1	130	0.8811	2.73	30	
1,1,2,2-Tetrachloroethane	0.958	0.0186	0.9294	0	103	41.2	150	0.9329	2.61	30	
Bromobenzene	0.938	0.0186	0.9294	0	101	84.6	121	0.9040	3.74	30	
2-Chlorotoluene	0.915	0.0232	0.9294	0	98.4	78.4	128	0.8860	3.22	30	
4-Chlorotoluene	0.925	0.0232	0.9294	0	99.5	81.2	123	0.9012	2.61	30	
1,2,3-Trichloropropane	0.951	0.0232	0.9294	0	102	66.4	132	0.9747	2.50	30	
1,2,4-Trichlorobenzene	0.892	0.0232	0.9294	0	96.0	68.9	139	0.8861	0.653	30	
1,3-Dichlorobenzene	0.843	0.0186	0.9294	0	90.7	87.8	120	0.8343	1.06	30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMSD** SampType: **MSD** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184674**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.830	0.0186	0.9294	0	89.3	88.1	119	0.8283	0.177	30	
1,2-Dichlorobenzene	0.862	0.0186	0.9294	0	92.8	88.1	120	0.8511	1.32	30	
1,2-Dibromo-3-chloropropane	0.969	0.465	0.9294	0	104	56.6	144	0.8765	10.0	30	
Hexachloro-1,3-butadiene	0.885	0.0465	0.9294	0	95.2	64.8	148	0.8845	0.0647	30	
1,2,3-Trichlorobenzene	0.902	0.0186	0.9294	0	97.1	59.3	150	0.8893	1.43	30	
Surr: Dibromofluoromethane	1.28		1.162		110	80	116		0		
Surr: Toluene-d8	1.17		1.162		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.22		1.162		105	82.8	113		0		

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28293** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **LCSS** Batch ID: **28293** Analysis Date: **5/11/2020** SeqNo: **1181211**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.42	0.0200	1.000	0	142	21.6	169				
Chloromethane	1.18	0.0500	1.000	0	118	45.3	153				
Vinyl chloride	1.10	0.0250	1.000	0	110	57.5	137				
Bromomethane	1.28	0.0500	1.000	0	128	32.8	194				
Trichlorofluoromethane (CFC-11)	1.05	0.0200	1.000	0	105	54.3	152				
Chloroethane	1.03	0.0500	1.000	0	103	52	146				
1,1-Dichloroethene	1.02	0.0200	1.000	0	102	62.8	139				
Methylene chloride	0.947	0.0200	1.000	0	94.7	78.4	118				
trans-1,2-Dichloroethene	0.963	0.0200	1.000	0	96.3	82	117				
1,1-Dichloroethane	0.957	0.0200	1.000	0	95.7	78	119				
cis-1,2-Dichloroethene	0.957	0.0200	1.000	0	95.7	81.9	116				
Chloroform	0.964	0.0200	1.000	0	96.4	80.8	117				
1,1,1-Trichloroethane (TCA)	0.980	0.0250	1.000	0	98.0	81.4	117				
1,1-Dichloropropene	0.977	0.0200	1.000	0	97.7	79.9	117				
Carbon tetrachloride	1.01	0.0500	1.000	0	101	80.4	117				
1,2-Dichloroethane (EDC)	1.00	0.0200	1.000	0	100	77.5	117				
Trichloroethene (TCE)	0.994	0.0200	1.000	0	99.4	83.4	115				
1,2-Dichloropropane	0.969	0.0200	1.000	0	96.9	77.6	117				
Bromodichloromethane	0.980	0.0200	1.000	0	98.0	78.9	116				
Dibromomethane	0.990	0.0200	1.000	0	99.0	81.2	115				
cis-1,3-Dichloropropene	1.00	0.0200	1.000	0	100	78	115				
trans-1,3-Dichloropropylene	1.01	0.0200	1.000	0	101	75.7	117				
1,1,2-Trichloroethane	1.01	0.0200	1.000	0	101	77.9	118				
1,3-Dichloropropane	1.01	0.0250	1.000	0	101	77.1	118				
Tetrachloroethene (PCE)	0.994	0.0250	1.000	0	99.4	84.3	117				
Dibromochloromethane	1.03	0.0250	1.000	0	103	77.9	118				
1,2-Dibromoethane (EDB)	1.03	0.00500	1.000	0	103	78.6	117				
Chlorobenzene	0.980	0.0250	1.000	0	98.0	86.5	113				
1,1,1,2-Tetrachloroethane	1.01	0.0250	1.000	0	101	84.8	113				

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28293** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **LCSS** Batch ID: **28293** Analysis Date: **5/11/2020** SeqNo: **1181211**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	1.06	0.0500	1.000	0	106	70.7	125				
1,1,2,2-Tetrachloroethane	1.01	0.0200	1.000	0	101	68.3	125				
Bromobenzene	0.992	0.0200	1.000	0	99.2	84	117				
2-Chlorotoluene	0.975	0.0250	1.000	0	97.5	80.4	122				
4-Chlorotoluene	0.970	0.0250	1.000	0	97.0	83.1	118				
1,2,3-Trichloropropane	1.08	0.0250	1.000	0	108	71	125				
1,2,4-Trichlorobenzene	1.05	0.0250	1.000	0	105	81	126				
1,3-Dichlorobenzene	0.997	0.0200	1.000	0	99.7	90.4	115				
1,4-Dichlorobenzene	0.997	0.0200	1.000	0	99.7	90.3	115				
1,2-Dichlorobenzene	1.01	0.0200	1.000	0	101	90.3	115				
1,2-Dibromo-3-chloropropane	1.11	0.500	1.000	0	111	62.3	136				
Hexachloro-1,3-butadiene	0.980	0.0500	1.000	0	98.0	77.8	133				
1,2,3-Trichlorobenzene	1.10	0.0200	1.000	0	110	75.9	130				
Surr: Dibromofluoromethane	1.26		1.250		101	80	116				
Surr: Toluene-d8	1.24		1.250		99.0	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.32		1.250		106	82.8	113				

Sample ID: **MB-28293** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **MBLKS** Batch ID: **28293** Analysis Date: **5/11/2020** SeqNo: **1181212**

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									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28293** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **MBLKS** Batch ID: **28293** Analysis Date: **5/11/2020** SeqNo: **1181212**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
Bromobenzene	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									

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28293**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **5/11/2020**	RunNo: **59119**
Client ID: **MBLKS**	Batch ID: **28293**		Analysis Date: **5/11/2020**	SeqNo: **1181212**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	1.15		1.250		92.4	80	116				
Surr: Toluene-d8	1.23		1.250		98.5	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.250		96.0	82.8	113				

Sample ID: **2005069-009BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **5/11/2020**	RunNo: **59119**
Client ID: **358-B2-12.5**	Batch ID: **28293**		Analysis Date: **5/11/2020**	SeqNo: **1181199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0253						0		30	
Chloromethane	ND	0.0633						0		30	
Vinyl chloride	ND	0.0317						0		30	
Bromomethane	ND	0.0633						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0253						0		30	
Chloroethane	ND	0.0633						0		30	
1,1-Dichloroethene	ND	0.0253						0		30	
Methylene chloride	ND	0.0253						0		30	
trans-1,2-Dichloroethene	ND	0.0253						0		30	
1,1-Dichloroethane	ND	0.0253						0		30	
cis-1,2-Dichloroethene	ND	0.0253						0		30	
Chloroform	ND	0.0253						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0317						0		30	
1,1-Dichloropropene	ND	0.0253						0		30	
Carbon tetrachloride	ND	0.0633						0		30	
1,2-Dichloroethane (EDC)	ND	0.0253						0		30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-009BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B2-12.5** Batch ID: **28293** Analysis Date: **5/11/2020** SeqNo: **1181199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.0253						0		30	
1,2-Dichloropropane	ND	0.0253						0		30	
Bromodichloromethane	ND	0.0253						0		30	
Dibromomethane	ND	0.0253						0		30	
cis-1,3-Dichloropropene	ND	0.0253						0		30	
trans-1,3-Dichloropropylene	ND	0.0253						0		30	
1,1,2-Trichloroethane	ND	0.0253						0		30	
1,3-Dichloropropane	ND	0.0317						0		30	
Tetrachloroethene (PCE)	ND	0.0317						0		30	
Dibromochloromethane	ND	0.0317						0		30	
1,2-Dibromoethane (EDB)	ND	0.00633						0		30	
Chlorobenzene	ND	0.0317						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0317						0		30	
Bromoform	ND	0.0633						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0253						0		30	
Bromobenzene	ND	0.0253						0		30	
2-Chlorotoluene	ND	0.0317						0		30	
4-Chlorotoluene	ND	0.0317						0		30	
1,2,3-Trichloropropane	ND	0.0317						0		30	
1,2,4-Trichlorobenzene	ND	0.0317						0		30	
1,3-Dichlorobenzene	ND	0.0253						0		30	
1,4-Dichlorobenzene	ND	0.0253						0		30	
1,2-Dichlorobenzene	ND	0.0253						0		30	
1,2-Dibromo-3-chloropropane	ND	0.633						0		30	
Hexachloro-1,3-butadiene	ND	0.0633						0		30	
1,2,3-Trichlorobenzene	ND	0.0253						0		30	
Surr: Dibromofluoromethane	1.55		1.583		97.9	80	116		0		
Surr: Toluene-d8	1.58		1.583		99.7	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.54		1.583		97.1	82.8	113		0		

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-009BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B2-12.5** Batch ID: **28293** Analysis Date: **5/11/2020** SeqNo: **1181199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2005077-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **BATCH** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181207**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0336						0		30	
Chloromethane	ND	0.0840						0		30	
Vinyl chloride	ND	0.0420						0		30	
Bromomethane	ND	0.0840						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0336						0		30	
Chloroethane	ND	0.0840						0		30	
1,1-Dichloroethene	ND	0.0336						0		30	
Methylene chloride	ND	0.0336						0		30	
trans-1,2-Dichloroethene	ND	0.0336						0		30	
1,1-Dichloroethane	ND	0.0336						0		30	
cis-1,2-Dichloroethene	ND	0.0336						0		30	
Chloroform	ND	0.0336						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0420						0		30	
1,1-Dichloropropene	ND	0.0336						0		30	
Carbon tetrachloride	ND	0.0840						0		30	
1,2-Dichloroethane (EDC)	ND	0.0336						0		30	
Trichloroethene (TCE)	ND	0.0336						0		30	
1,2-Dichloropropane	ND	0.0336						0		30	
Bromodichloromethane	ND	0.0336						0		30	
Dibromomethane	ND	0.0336						0		30	
cis-1,3-Dichloropropene	ND	0.0336						0		30	
trans-1,3-Dichloropropylene	ND	0.0336						0		30	
1,1,2-Trichloroethane	ND	0.0336						0		30	
1,3-Dichloropropane	ND	0.0420						0		30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005077-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **BATCH** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181207**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene (PCE)	ND	0.0420						0		30	
Dibromochloromethane	ND	0.0420						0		30	
1,2-Dibromoethane (EDB)	ND	0.00840						0		30	
Chlorobenzene	ND	0.0420						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0420						0		30	
Bromoform	ND	0.0840						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0336						0		30	
Bromobenzene	ND	0.0336						0		30	
2-Chlorotoluene	ND	0.0420						0		30	
4-Chlorotoluene	ND	0.0420						0		30	
1,2,3-Trichloropropane	ND	0.0420						0		30	
1,2,4-Trichlorobenzene	ND	0.0420						0		30	
1,3-Dichlorobenzene	ND	0.0336						0		30	
1,4-Dichlorobenzene	ND	0.0336						0		30	
1,2-Dichlorobenzene	ND	0.0336						0		30	
1,2-Dibromo-3-chloropropane	ND	0.840						0		30	
Hexachloro-1,3-butadiene	ND	0.0840						0		30	
1,2,3-Trichlorobenzene	ND	0.0336						0		30	
Surr: Dibromofluoromethane	1.97		2.101		93.8	80	116		0		
Surr: Toluene-d8	2.09		2.101		99.5	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	2.03		2.101		96.4	82.8	113		0		

Sample ID: **2005069-018BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B3-20** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181203**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.11	0.0189	0.9439	0	117	-0.64	180				
Chloromethane	1.11	0.0472	0.9439	0	117	33.2	162				
Vinyl chloride	1.02	0.0236	0.9439	0	108	47.2	146				

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-018BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B3-20** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181203**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	1.52	0.0472	0.9439	0	162	18.7	226				
Trichlorofluoromethane (CFC-11)	0.964	0.0189	0.9439	0	102	48.9	158				
Chloroethane	1.10	0.0472	0.9439	0	116	20.8	195				
1,1-Dichloroethene	0.993	0.0189	0.9439	0	105	67.1	135				
Methylene chloride	1.02	0.0189	0.9439	0	108	64.9	137				
trans-1,2-Dichloroethene	1.00	0.0189	0.9439	0	106	75.1	126				
1,1-Dichloroethane	0.992	0.0189	0.9439	0	105	68.4	132				
cis-1,2-Dichloroethene	1.01	0.0189	0.9439	0	107	76.2	125				
Chloroform	1.01	0.0189	0.9439	0	107	74.5	127				
1,1,1-Trichloroethane (TCA)	0.962	0.0236	0.9439	0	102	74.5	126				
1,1-Dichloropropene	0.966	0.0189	0.9439	0	102	70.7	128				
Carbon tetrachloride	0.950	0.0472	0.9439	0	101	72.5	126				
1,2-Dichloroethane (EDC)	1.05	0.0189	0.9439	0	111	70.4	128				
Trichloroethene (TCE)	1.00	0.0189	0.9439	0	106	64.7	145				
1,2-Dichloropropane	0.990	0.0189	0.9439	0	105	69.3	129				
Bromodichloromethane	0.994	0.0189	0.9439	0	105	75.9	120				
Dibromomethane	1.02	0.0189	0.9439	0	108	78.5	123				
cis-1,3-Dichloropropene	0.950	0.0189	0.9439	0	101	67.3	122				
trans-1,3-Dichloropropylene	0.943	0.0189	0.9439	0	99.9	64.4	124				
1,1,2-Trichloroethane	1.02	0.0189	0.9439	0	108	72.4	129				
1,3-Dichloropropane	1.01	0.0236	0.9439	0	107	70.5	128				
Tetrachloroethene (PCE)	0.996	0.0236	0.9439	0.03845	101	64.9	140				
Dibromochloromethane	0.949	0.0236	0.9439	0	101	71.8	125				
1,2-Dibromoethane (EDB)	1.01	0.00472	0.9439	0	107	73.8	126				
Chlorobenzene	0.989	0.0236	0.9439	0	105	85.1	118				
1,1,1,2-Tetrachloroethane	1.00	0.0236	0.9439	0	106	82.2	118				
Bromoform	0.970	0.0472	0.9439	0	103	66.1	130				
1,1,2,2-Tetrachloroethane	0.961	0.0189	0.9439	0	102	41.2	150				
Bromobenzene	0.989	0.0189	0.9439	0	105	84.6	121				

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-018BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B3-20** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181203**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	0.992	0.0236	0.9439	0	105	78.4	128				
4-Chlorotoluene	0.992	0.0236	0.9439	0	105	81.2	123				
1,2,3-Trichloropropane	0.987	0.0236	0.9439	0	105	66.4	132				
1,2,4-Trichlorobenzene	0.985	0.0236	0.9439	0	104	68.9	139				
1,3-Dichlorobenzene	0.999	0.0189	0.9439	0	106	87.8	120				
1,4-Dichlorobenzene	0.990	0.0189	0.9439	0	105	88.1	119				
1,2-Dichlorobenzene	1.01	0.0189	0.9439	0	107	88.1	120				
1,2-Dibromo-3-chloropropane	1.01	0.472	0.9439	0	107	56.6	144				
Hexachloro-1,3-butadiene	0.887	0.0472	0.9439	0	94.0	64.8	148				
1,2,3-Trichlorobenzene	1.02	0.0189	0.9439	0	108	59.3	150				
Surr: Dibromofluoromethane	1.22		1.180		103	80	116				
Surr: Toluene-d8	1.18		1.180		99.7	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.22		1.180		103	82.8	113				

Sample ID: **2005069-018BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B3-20** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181204**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.03	0.0189	0.9439	0	109	-0.64	180	1.109	7.85	30	
Chloromethane	1.09	0.0472	0.9439	0	115	33.2	162	1.106	1.88	30	
Vinyl chloride	0.967	0.0236	0.9439	0	102	47.2	146	1.017	5.09	30	
Bromomethane	1.36	0.0472	0.9439	0	145	18.7	226	1.525	11.1	30	
Trichlorofluoromethane (CFC-11)	0.905	0.0189	0.9439	0	95.8	48.9	158	0.9640	6.35	30	
Chloroethane	1.06	0.0472	0.9439	0	112	20.8	195	1.097	3.65	30	
1,1-Dichloroethene	0.924	0.0189	0.9439	0	97.9	67.1	135	0.9929	7.16	30	
Methylene chloride	0.986	0.0189	0.9439	0	104	64.9	137	1.017	3.12	30	
trans-1,2-Dichloroethene	0.953	0.0189	0.9439	0	101	75.1	126	1.002	5.02	30	
1,1-Dichloroethane	0.955	0.0189	0.9439	0	101	68.4	132	0.9920	3.78	30	
cis-1,2-Dichloroethene	0.962	0.0189	0.9439	0	102	76.2	125	1.009	4.75	30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-018BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B3-20** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181204**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	0.975	0.0189	0.9439	0	103	74.5	127	1.006	3.16	30	
1,1,1-Trichloroethane (TCA)	0.916	0.0236	0.9439	0	97.1	74.5	126	0.9622	4.89	30	
1,1-Dichloropropene	0.912	0.0189	0.9439	0	96.6	70.7	128	0.9661	5.81	30	
Carbon tetrachloride	0.906	0.0472	0.9439	0	96.0	72.5	126	0.9497	4.70	30	
1,2-Dichloroethane (EDC)	0.995	0.0189	0.9439	0	105	70.4	128	1.046	4.99	30	
Trichloroethene (TCE)	0.954	0.0189	0.9439	0	101	64.7	145	1.002	4.90	30	
1,2-Dichloropropane	0.950	0.0189	0.9439	0	101	69.3	129	0.9898	4.12	30	
Bromodichloromethane	0.963	0.0189	0.9439	0	102	75.9	120	0.9942	3.23	30	
Dibromomethane	0.967	0.0189	0.9439	0	102	78.5	123	1.021	5.43	30	
cis-1,3-Dichloropropene	0.914	0.0189	0.9439	0	96.8	67.3	122	0.9499	3.85	30	
trans-1,3-Dichloropropylene	0.914	0.0189	0.9439	0	96.8	64.4	124	0.9431	3.15	30	
1,1,2-Trichloroethane	0.970	0.0189	0.9439	0	103	72.4	129	1.017	4.75	30	
1,3-Dichloropropane	0.965	0.0236	0.9439	0	102	70.5	128	1.010	4.52	30	
Tetrachloroethene (PCE)	0.948	0.0236	0.9439	0.03845	96.4	64.9	140	0.9957	4.88	30	
Dibromochloromethane	0.941	0.0236	0.9439	0	99.7	71.8	125	0.9492	0.895	30	
1,2-Dibromoethane (EDB)	0.964	0.00472	0.9439	0	102	73.8	126	1.008	4.41	30	
Chlorobenzene	0.954	0.0236	0.9439	0	101	85.1	118	0.9887	3.59	30	
1,1,1,2-Tetrachloroethane	0.965	0.0236	0.9439	0	102	82.2	118	1.001	3.69	30	
Bromoform	0.925	0.0472	0.9439	0	98.0	66.1	130	0.9697	4.69	30	
1,1,2,2-Tetrachloroethane	0.948	0.0189	0.9439	0	100	41.2	150	0.9606	1.33	30	
Bromobenzene	0.965	0.0189	0.9439	0	102	84.6	121	0.9887	2.40	30	
2-Chlorotoluene	0.963	0.0236	0.9439	0	102	78.4	128	0.9921	3.02	30	
4-Chlorotoluene	0.963	0.0236	0.9439	0	102	81.2	123	0.9921	2.97	30	
1,2,3-Trichloropropane	0.960	0.0236	0.9439	0	102	66.4	132	0.9866	2.74	30	
1,2,4-Trichlorobenzene	0.965	0.0236	0.9439	0	102	68.9	139	0.9852	2.04	30	
1,3-Dichlorobenzene	0.965	0.0189	0.9439	0	102	87.8	120	0.9991	3.51	30	
1,4-Dichlorobenzene	0.961	0.0189	0.9439	0	102	88.1	119	0.9899	2.96	30	
1,2-Dichlorobenzene	0.972	0.0189	0.9439	0	103	88.1	120	1.010	3.84	30	
1,2-Dibromo-3-chloropropane	1.01	0.472	0.9439	0	107	56.6	144	1.010	0.339	30	

Work Order: 2005069
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-018BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/11/2020** RunNo: **59119**
Client ID: **358-B3-20** Batch ID: **28293** Analysis Date: **5/12/2020** SeqNo: **1181204**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	0.877	0.0472	0.9439	0	92.9	64.8	148	0.8868	1.09	30	
1,2,3-Trichlorobenzene	0.994	0.0189	0.9439	0	105	59.3	150	1.023	2.90	30	
Surr: Dibromofluoromethane	1.23		1.180		105	80	116		0		
Surr: Toluene-d8	1.18		1.180		99.7	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.21		1.180		103	82.8	113		0		

Sample Log-In Check List

Client Name:	**ONEILL**	Work Order Number:	**2005069**
Logged by:	**Clare Griggs**	Date Received:	**5/8/2020 8:15:00 AM**

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 >2°C to 6°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	2.6
Sample	4.8
Temp BLank	4.6

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

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

Chain of Custody Record & Laboratory Services Agreement

Date: 5/7/20 | Page: 1 of: 2 | Laboratory Project No (internal): 20085069

Project Name: FZOO | Special Remarks:

Client: OSG | Project No: 2021

Address: | Collected by: Atkins

City, State, Zip: | Location: FL358

Telephone: | Report To (PM): Atkins | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: | PM Email:

	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)	Comments
1	358-B1-2.5	5/7/20	925	S													
2	-5		930														
3	-7.5		1000														
4	-10		1010		X												
5	-15		1020														
6	-20		1040		X												
7	-25		1050														
8	358-B2-5		1200														
9	-12.5		1210		X												
10	-15		1215														

*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

Turn-around Time:
- ☒ Standard
- ☐ B Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

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 [signature]	5/7/20 1700	x [signature]	5/8/20 @ 0815
Relinquished	Date/Time	Received	Date/Time
x		x	

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

Chain of Custody Record & Laboratory Services Agreement

Date: 5/7/20 Page: 2 of:

Laboratory Project No (internal): 20058069

Project Name: FL00

Project No: 2021

Collected by: ATKINS

Location: FL358

Report To (PM): ATKINS

Special Remarks:

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

Client: 089

Address:

City, State, Zip:

Telephone:

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	358-B2-20	5/7/20	1220	S														
2	" -25	"	1230	S	X													
3	358-B3-5		1425	S														
4	-7.5		1430	S														
5	-10		1435	S														
6	-12.5		1440	S	X													
7	-15		1445	S														
8	-20	"	1500	S	X													
9	TRIP BLANK	5/6/20	—		X													
10																		

*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	5/7/20 1700	x	5/8/20 @ 0815
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:

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

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

Chain of Custody Record & Laboratory Services Agreement

Date: 5/7/20 Page: 2 of:

Laboratory Project No (internal): 2005B0169

Project Name: F200

Project No: 2021

Collected by: ATK, NJ

Location: FL358

Report To (PM): ATK, NJ

Special Remarks:
(X) Add per VA 5/19/20 NEXT DAY
CG

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

Client: 089

Address:

City, State, Zip:

Telephone:

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	358-B2-20	5/7/20	1220	S															
2	" -25		1230	S	X														
3	358-B3-5		1425	S															
4	-7.5		1430	S															
5	-10		1435	S	(X)														
6	-12.5		1440	S	X														
7	-15		1445	S	(X)														
8	-20	"	1500	S	X														
9	TRIP BLANK	5/6/20	—		X														
10																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SO = 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 x [signature] Date/Time 5/7/20 1700

Relinquished x Date/Time

Received x [signature] Date/Time 5/8/20 @ 0815

Received x Date/Time

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day (specify)

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

O'Neill Service Group
Vance Atkins
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: F200
Work Order Number: 2005085

May 20, 2020

Attention Vance Atkins:

Fremont Analytical, Inc. received 21 sample(s) on 5/8/2020 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: *05/20/2020*

CLIENT: O'Neill Service Group
Project: F200
Work Order: 2005085

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2005085-001	358-B4-5	05/08/2020 8:20 AM	05/08/2020 4:27 PM
2005085-002	358-B4-10	05/08/2020 8:50 AM	05/08/2020 4:27 PM
2005085-003	358-B4-12.5	05/08/2020 8:55 AM	05/08/2020 4:27 PM
2005085-004	358-B4-15	05/08/2020 9:05 AM	05/08/2020 4:27 PM
2005085-005	358-B4-20	05/08/2020 9:10 AM	05/08/2020 4:27 PM
2005085-006	358-B4-25	05/08/2020 9:15 AM	05/08/2020 4:27 PM
2005085-007	358-B5-2.5	05/08/2020 10:35 AM	05/08/2020 4:27 PM
2005085-008	358-B5-5	05/08/2020 10:40 AM	05/08/2020 4:27 PM
2005085-009	358-B5-7.5	05/08/2020 10:45 AM	05/08/2020 4:27 PM
2005085-010	358-B5-10	05/08/2020 10:50 AM	05/08/2020 4:27 PM
2005085-011	358-B5-12.5	05/08/2020 10:55 AM	05/08/2020 4:27 PM
2005085-012	358-B5-15	05/08/2020 11:00 AM	05/08/2020 4:27 PM
2005085-013	358-B5-20	05/08/2020 11:10 AM	05/08/2020 4:27 PM
2005085-014	358-B5-25	05/08/2020 11:20 AM	05/08/2020 4:27 PM
2005085-015	358-B6-5	05/08/2020 1:05 PM	05/08/2020 4:27 PM
2005085-016	358-B6-7.5	05/08/2020 1:10 PM	05/08/2020 4:27 PM
2005085-017	358-B6-10	05/08/2020 1:20 PM	05/08/2020 4:27 PM
2005085-018	358-B6-12.5	05/08/2020 1:25 PM	05/08/2020 4:27 PM
2005085-019	358-B6-15	05/08/2020 1:35 PM	05/08/2020 4:27 PM
2005085-020	358-B6-20	05/08/2020 1:40 PM	05/08/2020 4:27 PM
2005085-021	358-B6-25	05/08/2020 1:45 PM	05/08/2020 4:27 PM

Case Narrative

WO#: **2005085**
Date: **5/20/2020**

CLIENT: O'Neill Service Group
Project: F200

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.

5/20/20: Revision 1 includes additional analysis requested by client.

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: O'Neill Service Group **Collection Date:** 5/8/2020 9:05:00 AM
Project: F200
Lab ID: 2005085-004 **Matrix:** Soil
Client Sample ID: **358-B4-15**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Chloromethane	ND	0.0688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Vinyl chloride	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Bromomethane	ND	0.0688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Trichlorofluoromethane (CFC-11)	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Chloroethane	ND	0.0688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1-Dichloroethene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Methylene chloride	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
trans-1,2-Dichloroethene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1-Dichloroethane	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
cis-1,2-Dichloroethene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Chloroform	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1,1-Trichloroethane (TCA)	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1-Dichloropropene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Carbon tetrachloride	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2-Dichloroethane (EDC)	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Trichloroethene (TCE)	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2-Dichloropropane	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Bromodichloromethane	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Dibromomethane	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
cis-1,3-Dichloropropene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
trans-1,3-Dichloropropylene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1,2-Trichloroethane	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,3-Dichloropropane	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Tetrachloroethene (PCE)	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Dibromochloromethane	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2-Dibromoethane (EDB)	ND	0.00688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Chlorobenzene	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1,1,2-Tetrachloroethane	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Bromoform	ND	0.0688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,1,2,2-Tetrachloroethane	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Bromobenzene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
2-Chlorotoluene	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
4-Chlorotoluene	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2,3-Trichloropropane	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2,4-Trichlorobenzene	ND	0.0344		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,3-Dichlorobenzene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,4-Dichlorobenzene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2-Dichlorobenzene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 9:05:00 AM
Project: F200
Lab ID: 2005085-004
Matrix: Soil
Client Sample ID: **358-B4-15**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Hexachloro-1,3-butadiene	ND	0.0688		mg/Kg-dry	1	5/12/2020 12:02:41 PM
1,2,3-Trichlorobenzene	ND	0.0275		mg/Kg-dry	1	5/12/2020 12:02:41 PM
Surr: Dibromofluoromethane	98.0	80 - 116		%Rec	1	5/12/2020 12:02:41 PM
Surr: Toluene-d8	101	84.8 - 113		%Rec	1	5/12/2020 12:02:41 PM
Surr: 1-Bromo-4-fluorobenzene	96.8	82.8 - 113		%Rec	1	5/12/2020 12:02:41 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	12.9	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 9:10:00 AM
Project: F200
Lab ID: 2005085-005 **Matrix:** Soil
Client Sample ID: **358-B4-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Chloromethane	ND	0.0588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Vinyl chloride	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Bromomethane	ND	0.0588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Trichlorofluoromethane (CFC-11)	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Chloroethane	ND	0.0588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1-Dichloroethene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Methylene chloride	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
trans-1,2-Dichloroethene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1-Dichloroethane	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
cis-1,2-Dichloroethene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Chloroform	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1,1-Trichloroethane (TCA)	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1-Dichloropropene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Carbon tetrachloride	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2-Dichloroethane (EDC)	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Trichloroethene (TCE)	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2-Dichloropropane	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Bromodichloromethane	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Dibromomethane	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
cis-1,3-Dichloropropene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
trans-1,3-Dichloropropylene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1,2-Trichloroethane	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,3-Dichloropropane	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Tetrachloroethene (PCE)	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Dibromochloromethane	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2-Dibromoethane (EDB)	ND	0.00588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Chlorobenzene	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1,1,2-Tetrachloroethane	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Bromoform	ND	0.0588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,1,2,2-Tetrachloroethane	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Bromobenzene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
2-Chlorotoluene	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
4-Chlorotoluene	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2,3-Trichloropropane	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2,4-Trichlorobenzene	ND	0.0294		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,3-Dichlorobenzene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,4-Dichlorobenzene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2-Dichlorobenzene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 9:10:00 AM
Project: F200
Lab ID: 2005085-005
Matrix: Soil
Client Sample ID: **358-B4-20**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Hexachloro-1,3-butadiene	ND	0.0588		mg/Kg-dry	1	5/12/2020 1:02:54 PM
1,2,3-Trichlorobenzene	ND	0.0235		mg/Kg-dry	1	5/12/2020 1:02:54 PM
Surr: Dibromofluoromethane	101	80 - 116		%Rec	1	5/12/2020 1:02:54 PM
Surr: Toluene-d8	101	84.8 - 113		%Rec	1	5/12/2020 1:02:54 PM
Surr: 1-Bromo-4-fluorobenzene	97.8	82.8 - 113		%Rec	1	5/12/2020 1:02:54 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	16.3	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 10:40:00 AM
Project: F200
Lab ID: 2005085-008 **Matrix:** Soil
Client Sample ID: **358-B5-5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Chloromethane	ND	0.0643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Vinyl chloride	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Bromomethane	ND	0.0643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Chloroethane	ND	0.0643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1-Dichloroethene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Methylene chloride	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
trans-1,2-Dichloroethene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1-Dichloroethane	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
cis-1,2-Dichloroethene	0.0810	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Chloroform	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1-Dichloropropene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Carbon tetrachloride	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2-Dichloroethane (EDC)	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Trichloroethene (TCE)	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2-Dichloropropane	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Bromodichloromethane	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Dibromomethane	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
cis-1,3-Dichloropropene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
trans-1,3-Dichloropropylene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1,2-Trichloroethane	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,3-Dichloropropane	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Tetrachloroethene (PCE)	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Dibromochloromethane	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2-Dibromoethane (EDB)	ND	0.00643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Chlorobenzene	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Bromoform	ND	0.0643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Bromobenzene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
2-Chlorotoluene	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
4-Chlorotoluene	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2,3-Trichloropropane	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2,4-Trichlorobenzene	ND	0.0321		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,3-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,4-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 10:40:00 AM
Project: F200
Lab ID: 2005085-008
Matrix: Soil
Client Sample ID: **358-B5-5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Hexachloro-1,3-butadiene	ND	0.0643		mg/Kg-dry	1	5/12/2020 1:33:00 PM
1,2,3-Trichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/12/2020 1:33:00 PM
Surr: Dibromofluoromethane	101	80 - 116		%Rec	1	5/12/2020 1:33:00 PM
Surr: Toluene-d8	99.7	84.8 - 113		%Rec	1	5/12/2020 1:33:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	82.8 - 113		%Rec	1	5/12/2020 1:33:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	16.6	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 10:50:00 AM
Project: F200
Lab ID: 2005085-010 **Matrix:** Soil
Client Sample ID: **358-B5-10**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Chloromethane	ND	0.0562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Vinyl chloride	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Bromomethane	ND	0.0562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Trichlorofluoromethane (CFC-11)	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Chloroethane	ND	0.0562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1-Dichloroethene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Methylene chloride	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
trans-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1-Dichloroethane	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
cis-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Chloroform	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1,1-Trichloroethane (TCA)	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1-Dichloropropene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Carbon tetrachloride	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2-Dichloroethane (EDC)	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Trichloroethene (TCE)	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2-Dichloropropane	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Bromodichloromethane	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
cis-1,3-Dichloropropene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
trans-1,3-Dichloropropylene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1,2-Trichloroethane	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,3-Dichloropropane	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Tetrachloroethene (PCE)	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Dibromochloromethane	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2-Dibromoethane (EDB)	ND	0.00562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Chlorobenzene	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1,1,2-Tetrachloroethane	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Bromoform	ND	0.0562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,1,2,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Bromobenzene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
2-Chlorotoluene	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
4-Chlorotoluene	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2,3-Trichloropropane	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2,4-Trichlorobenzene	ND	0.0281		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,3-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,4-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 10:50:00 AM
Project: F200
Lab ID: 2005085-010
Matrix: Soil
Client Sample ID: **358-B5-10**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Hexachloro-1,3-butadiene	ND	0.0562		mg/Kg-dry	1	5/12/2020 2:03:08 PM
1,2,3-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	5/12/2020 2:03:08 PM
Surr: Dibromofluoromethane	95.1	80 - 116		%Rec	1	5/12/2020 2:03:08 PM
Surr: Toluene-d8	99.0	84.8 - 113		%Rec	1	5/12/2020 2:03:08 PM
Surr: 1-Bromo-4-fluorobenzene	96.4	82.8 - 113		%Rec	1	5/12/2020 2:03:08 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	12.7	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 11:00:00 AM
Project: F200
Lab ID: 2005085-012 **Matrix:** Soil
Client Sample ID: **358-B5-15**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28369 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Chloromethane	ND	0.0550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Vinyl chloride	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Bromomethane	ND	0.0550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Trichlorofluoromethane (CFC-11)	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Chloroethane	ND	0.0550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1-Dichloroethene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Methylene chloride	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
trans-1,2-Dichloroethene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1-Dichloroethane	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
cis-1,2-Dichloroethene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Chloroform	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1,1-Trichloroethane (TCA)	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1-Dichloropropene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Carbon tetrachloride	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2-Dichloroethane (EDC)	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Trichloroethene (TCE)	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2-Dichloropropane	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Bromodichloromethane	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Dibromomethane	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
cis-1,3-Dichloropropene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
trans-1,3-Dichloropropylene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1,2-Trichloroethane	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,3-Dichloropropane	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Tetrachloroethene (PCE)	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Dibromochloromethane	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2-Dibromoethane (EDB)	ND	0.00550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Chlorobenzene	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1,1,2-Tetrachloroethane	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Bromoform	ND	0.0550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,1,2,2-Tetrachloroethane	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Bromobenzene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
2-Chlorotoluene	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
4-Chlorotoluene	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2,3-Trichloropropane	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2,4-Trichlorobenzene	ND	0.0275		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,3-Dichlorobenzene	ND	0.0220	*	mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,4-Dichlorobenzene	ND	0.0220	*	mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2-Dichlorobenzene	ND	0.0220	*	mg/Kg-dry	1	5/20/2020 8:46:33 AM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 11:00:00 AM
Project: F200
Lab ID: 2005085-012
Matrix: Soil
Client Sample ID: **358-B5-15**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28369		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Hexachloro-1,3-butadiene	ND	0.0550		mg/Kg-dry	1	5/20/2020 8:46:33 AM
1,2,3-Trichlorobenzene	ND	0.0220		mg/Kg-dry	1	5/20/2020 8:46:33 AM
Surr: Dibromofluoromethane	99.7	80 - 116		%Rec	1	5/20/2020 8:46:33 AM
Surr: Toluene-d8	101	84.8 - 113		%Rec	1	5/20/2020 8:46:33 AM
Surr: 1-Bromo-4-fluorobenzene	98.7	82.8 - 113		%Rec	1	5/20/2020 8:46:33 AM

NOTES:
* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)				Batch ID: R59252		Analyst: EH
Percent Moisture	14.4	0.500		wt%	1	5/19/2020 12:14:02 PM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 11:10:00 AM
Project: F200
Lab ID: 2005085-013 **Matrix:** Soil
Client Sample ID: **358-B5-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Chloromethane	ND	0.0469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Vinyl chloride	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Bromomethane	ND	0.0469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Trichlorofluoromethane (CFC-11)	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Chloroethane	ND	0.0469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1-Dichloroethene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Methylene chloride	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
trans-1,2-Dichloroethene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1-Dichloroethane	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
cis-1,2-Dichloroethene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Chloroform	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1,1-Trichloroethane (TCA)	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1-Dichloropropene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Carbon tetrachloride	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2-Dichloroethane (EDC)	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Trichloroethene (TCE)	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2-Dichloropropane	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Bromodichloromethane	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Dibromomethane	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
cis-1,3-Dichloropropene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
trans-1,3-Dichloropropylene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1,2-Trichloroethane	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,3-Dichloropropane	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Tetrachloroethene (PCE)	0.358	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Dibromochloromethane	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2-Dibromoethane (EDB)	ND	0.00469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Chlorobenzene	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1,1,2-Tetrachloroethane	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Bromoform	ND	0.0469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,1,2,2-Tetrachloroethane	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Bromobenzene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
2-Chlorotoluene	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
4-Chlorotoluene	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2,3-Trichloropropane	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2,4-Trichlorobenzene	ND	0.0234		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,3-Dichlorobenzene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,4-Dichlorobenzene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2-Dichlorobenzene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 11:10:00 AM
Project: F200
Lab ID: 2005085-013
Matrix: Soil
Client Sample ID: **358-B5-20**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Hexachloro-1,3-butadiene	ND	0.0469		mg/Kg-dry	1	5/12/2020 2:33:14 PM
1,2,3-Trichlorobenzene	ND	0.0188		mg/Kg-dry	1	5/12/2020 2:33:14 PM
Surr: Dibromofluoromethane	97.3	80 - 116		%Rec	1	5/12/2020 2:33:14 PM
Surr: Toluene-d8	99.7	84.8 - 113		%Rec	1	5/12/2020 2:33:14 PM
Surr: 1-Bromo-4-fluorobenzene	95.8	82.8 - 113		%Rec	1	5/12/2020 2:33:14 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	11.6	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 11:20:00 AM
Project: F200
Lab ID: 2005085-014 **Matrix:** Soil
Client Sample ID: **358-B5-25**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28369 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Chloromethane	ND	0.0590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Vinyl chloride	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Bromomethane	ND	0.0590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Trichlorofluoromethane (CFC-11)	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Chloroethane	ND	0.0590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1-Dichloroethene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Methylene chloride	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
trans-1,2-Dichloroethene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1-Dichloroethane	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
cis-1,2-Dichloroethene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Chloroform	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1,1-Trichloroethane (TCA)	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1-Dichloropropene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Carbon tetrachloride	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2-Dichloroethane (EDC)	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Trichloroethene (TCE)	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2-Dichloropropane	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Bromodichloromethane	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Dibromomethane	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
cis-1,3-Dichloropropene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
trans-1,3-Dichloropropylene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1,2-Trichloroethane	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,3-Dichloropropane	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Tetrachloroethene (PCE)	0.123	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Dibromochloromethane	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2-Dibromoethane (EDB)	ND	0.00590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Chlorobenzene	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1,1,2-Tetrachloroethane	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Bromoform	ND	0.0590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,1,2,2-Tetrachloroethane	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Bromobenzene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
2-Chlorotoluene	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
4-Chlorotoluene	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2,3-Trichloropropane	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2,4-Trichlorobenzene	ND	0.0295		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,3-Dichlorobenzene	ND	0.0236	*	mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,4-Dichlorobenzene	ND	0.0236	*	mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2-Dichlorobenzene	ND	0.0236	*	mg/Kg-dry	1	5/20/2020 9:16:43 AM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 11:20:00 AM
Project: F200
Lab ID: 2005085-014
Matrix: Soil
Client Sample ID: **358-B5-25**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28369		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Hexachloro-1,3-butadiene	ND	0.0590		mg/Kg-dry	1	5/20/2020 9:16:43 AM
1,2,3-Trichlorobenzene	ND	0.0236		mg/Kg-dry	1	5/20/2020 9:16:43 AM
Surr: Dibromofluoromethane	107	80 - 116		%Rec	1	5/20/2020 9:16:43 AM
Surr: Toluene-d8	101	84.8 - 113		%Rec	1	5/20/2020 9:16:43 AM
Surr: 1-Bromo-4-fluorobenzene	100	82.8 - 113		%Rec	1	5/20/2020 9:16:43 AM

NOTES:
* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)				Batch ID: R59252		Analyst: EH
Percent Moisture	15.0	0.500		wt%	1	5/19/2020 12:14:02 PM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 1:05:00 PM
Project: F200
Lab ID: 2005085-015 **Matrix:** Soil
Client Sample ID: **358-B6-5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Chloromethane	ND	0.0790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Vinyl chloride	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Bromomethane	ND	0.0790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Trichlorofluoromethane (CFC-11)	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Chloroethane	ND	0.0790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1-Dichloroethene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Methylene chloride	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
trans-1,2-Dichloroethene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1-Dichloroethane	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
cis-1,2-Dichloroethene	0.0949	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Chloroform	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1,1-Trichloroethane (TCA)	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1-Dichloropropene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Carbon tetrachloride	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2-Dichloroethane (EDC)	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Trichloroethene (TCE)	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2-Dichloropropane	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Bromodichloromethane	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Dibromomethane	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
cis-1,3-Dichloropropene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
trans-1,3-Dichloropropylene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1,2-Trichloroethane	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,3-Dichloropropane	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Tetrachloroethene (PCE)	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Dibromochloromethane	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2-Dibromoethane (EDB)	ND	0.00790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Chlorobenzene	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1,1,2-Tetrachloroethane	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Bromoform	ND	0.0790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,1,2,2-Tetrachloroethane	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Bromobenzene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
2-Chlorotoluene	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
4-Chlorotoluene	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2,3-Trichloropropane	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2,4-Trichlorobenzene	ND	0.0395		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,3-Dichlorobenzene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,4-Dichlorobenzene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2-Dichlorobenzene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 1:05:00 PM
Project: F200
Lab ID: 2005085-015
Matrix: Soil
Client Sample ID: **358-B6-5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Hexachloro-1,3-butadiene	ND	0.0790		mg/Kg-dry	1	5/12/2020 3:03:21 PM
1,2,3-Trichlorobenzene	ND	0.0316		mg/Kg-dry	1	5/12/2020 3:03:21 PM
Surr: Dibromofluoromethane	99.1	80 - 116		%Rec	1	5/12/2020 3:03:21 PM
Surr: Toluene-d8	100	84.8 - 113		%Rec	1	5/12/2020 3:03:21 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	82.8 - 113		%Rec	1	5/12/2020 3:03:21 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	32.5	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 1:20:00 PM
Project: F200
Lab ID: 2005085-017 **Matrix:** Soil
Client Sample ID: **358-B6-10**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Chloromethane	ND	0.0467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Vinyl chloride	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Bromomethane	ND	0.0467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Trichlorofluoromethane (CFC-11)	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Chloroethane	ND	0.0467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1-Dichloroethene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Methylene chloride	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
trans-1,2-Dichloroethene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1-Dichloroethane	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
cis-1,2-Dichloroethene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Chloroform	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1,1-Trichloroethane (TCA)	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1-Dichloropropene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Carbon tetrachloride	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2-Dichloroethane (EDC)	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Trichloroethene (TCE)	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2-Dichloropropane	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Bromodichloromethane	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Dibromomethane	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
cis-1,3-Dichloropropene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
trans-1,3-Dichloropropylene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1,2-Trichloroethane	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,3-Dichloropropane	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Tetrachloroethene (PCE)	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Dibromochloromethane	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2-Dibromoethane (EDB)	ND	0.00467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Chlorobenzene	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1,1,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Bromoform	ND	0.0467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,1,2,2-Tetrachloroethane	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Bromobenzene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
2-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
4-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2,3-Trichloropropane	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2,4-Trichlorobenzene	ND	0.0233		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,3-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,4-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 1:20:00 PM
Project: F200
Lab ID: 2005085-017 **Matrix:** Soil
Client Sample ID: **358-B6-10**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Hexachloro-1,3-butadiene	ND	0.0467		mg/Kg-dry	1	5/12/2020 3:33:29 PM
1,2,3-Trichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/12/2020 3:33:29 PM
Surr: Dibromofluoromethane	98.2	80 - 116		%Rec	1	5/12/2020 3:33:29 PM
Surr: Toluene-d8	100	84.8 - 113		%Rec	1	5/12/2020 3:33:29 PM
Surr: 1-Bromo-4-fluorobenzene	96.4	82.8 - 113		%Rec	1	5/12/2020 3:33:29 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	12.9	0.500		wt%	1	5/12/2020 9:40:39 AM

Client: O'Neill Service Group **Collection Date:** 5/8/2020 1:40:00 PM
Project: F200
Lab ID: 2005085-020 **Matrix:** Soil
Client Sample ID: **358-B6-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Chloromethane	ND	0.0491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Vinyl chloride	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Bromomethane	ND	0.0491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Trichlorofluoromethane (CFC-11)	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Chloroethane	ND	0.0491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1-Dichloroethene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Methylene chloride	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
trans-1,2-Dichloroethene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1-Dichloroethane	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
cis-1,2-Dichloroethene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Chloroform	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1,1-Trichloroethane (TCA)	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1-Dichloropropene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Carbon tetrachloride	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2-Dichloroethane (EDC)	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Trichloroethene (TCE)	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2-Dichloropropane	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Bromodichloromethane	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Dibromomethane	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
cis-1,3-Dichloropropene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
trans-1,3-Dichloropropylene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1,2-Trichloroethane	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,3-Dichloropropane	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Tetrachloroethene (PCE)	0.0269	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Dibromochloromethane	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2-Dibromoethane (EDB)	ND	0.00491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Chlorobenzene	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1,1,2-Tetrachloroethane	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Bromoform	ND	0.0491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,1,2,2-Tetrachloroethane	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Bromobenzene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
2-Chlorotoluene	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
4-Chlorotoluene	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2,3-Trichloropropane	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2,4-Trichlorobenzene	ND	0.0246		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,3-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,4-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM

Analytical Report

Work Order: **2005085**
Date Reported: **5/20/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 1:40:00 PM
Project: F200
Lab ID: 2005085-020
Matrix: Soil
Client Sample ID: **358-B6-20**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Hexachloro-1,3-butadiene	ND	0.0491		mg/Kg-dry	1	5/12/2020 4:03:39 PM
1,2,3-Trichlorobenzene	ND	0.0197		mg/Kg-dry	1	5/12/2020 4:03:39 PM
Surr: Dibromofluoromethane	97.9	80 - 116		%Rec	1	5/12/2020 4:03:39 PM
Surr: Toluene-d8	99.2	84.8 - 113		%Rec	1	5/12/2020 4:03:39 PM
Surr: 1-Bromo-4-fluorobenzene	97.2	82.8 - 113		%Rec	1	5/12/2020 4:03:39 PM
Sample Moisture (Percent Moisture)				Batch ID: R59116		Analyst: MM
Percent Moisture	10.1	0.500		wt%	1	5/12/2020 9:40:39 AM

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28369** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **LCSS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184677**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.945	0.0200	1.000	0	94.5	21.6	169				
Chloromethane	0.944	0.0500	1.000	0	94.4	45.3	153				
Vinyl chloride	0.929	0.0250	1.000	0	92.9	57.5	137				
Bromomethane	0.918	0.0500	1.000	0	91.8	32.8	194				
Trichlorofluoromethane (CFC-11)	0.957	0.0200	1.000	0	95.7	54.3	152				
Chloroethane	0.954	0.0500	1.000	0	95.4	52	146				
1,1-Dichloroethene	0.941	0.0200	1.000	0	94.1	62.8	139				
Methylene chloride	0.952	0.0200	1.000	0	95.2	78.4	118				
trans-1,2-Dichloroethene	0.954	0.0200	1.000	0	95.4	82	117				
1,1-Dichloroethane	0.959	0.0200	1.000	0	95.9	78	119				
cis-1,2-Dichloroethene	0.978	0.0200	1.000	0	97.8	81.9	116				
Chloroform	0.960	0.0200	1.000	0	96.0	80.8	117				
1,1,1-Trichloroethane (TCA)	0.962	0.0250	1.000	0	96.2	81.4	117				
1,1-Dichloropropene	0.952	0.0200	1.000	0	95.2	79.9	117				
Carbon tetrachloride	0.944	0.0500	1.000	0	94.4	80.4	117				
1,2-Dichloroethane (EDC)	0.969	0.0200	1.000	0	96.9	77.5	117				
Trichloroethene (TCE)	0.944	0.0200	1.000	0	94.4	83.4	115				
1,2-Dichloropropane	0.959	0.0200	1.000	0	95.9	77.6	117				
Bromodichloromethane	0.952	0.0200	1.000	0	95.2	78.9	116				
Dibromomethane	0.972	0.0200	1.000	0	97.2	81.2	115				
cis-1,3-Dichloropropene	0.963	0.0200	1.000	0	96.3	78	115				
trans-1,3-Dichloropropylene	0.955	0.0200	1.000	0	95.5	75.7	117				
1,1,2-Trichloroethane	0.948	0.0200	1.000	0	94.8	77.9	118				
1,3-Dichloropropane	0.943	0.0250	1.000	0	94.3	77.1	118				
Tetrachloroethene (PCE)	0.937	0.0250	1.000	0	93.7	84.3	117				
Dibromochloromethane	0.951	0.0250	1.000	0	95.1	77.9	118				
1,2-Dibromoethane (EDB)	0.953	0.00500	1.000	0	95.3	78.6	117				
Chlorobenzene	0.946	0.0250	1.000	0	94.6	86.5	113				
1,1,1,2-Tetrachloroethane	0.920	0.0250	1.000	0	92.0	84.8	113				

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28369** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **LCSS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184677**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.922	0.0500	1.000	0	92.2	70.7	125				
1,1,2,2-Tetrachloroethane	0.927	0.0200	1.000	0	92.7	68.3	125				
Bromobenzene	0.963	0.0200	1.000	0	96.3	84	117				
2-Chlorotoluene	0.966	0.0250	1.000	0	96.6	80.4	122				
4-Chlorotoluene	0.969	0.0250	1.000	0	96.9	83.1	118				
1,2,3-Trichloropropane	0.954	0.0250	1.000	0	95.4	71	125				
1,2,4-Trichlorobenzene	0.956	0.0250	1.000	0	95.6	81	126				
1,3-Dichlorobenzene	0.890	0.0200	1.000	0	89.0	90.4	115				S
1,4-Dichlorobenzene	0.875	0.0200	1.000	0	87.5	90.3	115				S
1,2-Dichlorobenzene	0.884	0.0200	1.000	0	88.4	90.3	115				S
1,2-Dibromo-3-chloropropane	0.953	0.500	1.000	0	95.3	62.3	136				
Hexachloro-1,3-butadiene	1.01	0.0500	1.000	0	101	77.8	133				
1,2,3-Trichlorobenzene	0.932	0.0200	1.000	0	93.2	75.9	130				
Surr: Dibromofluoromethane	1.35		1.250		108	80	116				
Surr: Toluene-d8	1.26		1.250		101	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.30		1.250		104	82.8	113				

NOTES:
S - Outlying spike recovery observed (low bias). Samples will be qualified with a *.

Sample ID: **MB-28369** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **MBLKS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184678**

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									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28369** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **MBLKS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
Bromobenzene	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									

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28369** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **MBLKS** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	1.22		1.250		97.4	80	116				
Surr: Toluene-d8	1.26		1.250		101	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.4	82.8	113				

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2005069-017BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184667**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0171						0		30	
Chloromethane	ND	0.0427						0		30	
Vinyl chloride	ND	0.0214						0		30	
Bromomethane	ND	0.0427						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0171						0		30	
Chloroethane	ND	0.0427						0		30	
1,1-Dichloroethene	ND	0.0171						0		30	
Methylene chloride	ND	0.0171						0		30	
trans-1,2-Dichloroethene	ND	0.0171						0		30	
1,1-Dichloroethane	ND	0.0171						0		30	
cis-1,2-Dichloroethene	0.0653	0.0171						0.06688	2.35	30	
Chloroform	ND	0.0171						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0214						0		30	
1,1-Dichloropropene	ND	0.0171						0		30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-017BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184667**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	ND	0.0427						0		30	
1,2-Dichloroethane (EDC)	ND	0.0171						0		30	
Trichloroethene (TCE)	0.0378	0.0171						0.03793	0.371	30	
1,2-Dichloropropane	ND	0.0171						0		30	
Bromodichloromethane	ND	0.0171						0		30	
Dibromomethane	ND	0.0171						0		30	
cis-1,3-Dichloropropene	ND	0.0171						0		30	
trans-1,3-Dichloropropylene	ND	0.0171						0		30	
1,1,2-Trichloroethane	ND	0.0171						0		30	
1,3-Dichloropropane	ND	0.0214						0		30	
Tetrachloroethene (PCE)	0.115	0.0214						0.1215	5.82	30	
Dibromochloromethane	ND	0.0214						0		30	
1,2-Dibromoethane (EDB)	ND	0.00427						0		30	
Chlorobenzene	ND	0.0214						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0214						0		30	
Bromoform	ND	0.0427						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0171						0		30	
Bromobenzene	ND	0.0171						0		30	
2-Chlorotoluene	ND	0.0214						0		30	
4-Chlorotoluene	ND	0.0214						0		30	
1,2,3-Trichloropropane	ND	0.0214						0		30	
1,2,4-Trichlorobenzene	ND	0.0214						0		30	
1,3-Dichlorobenzene	ND	0.0171						0		30	*
1,4-Dichlorobenzene	ND	0.0171						0		30	*
1,2-Dichlorobenzene	ND	0.0171						0		30	*
1,2-Dibromo-3-chloropropane	ND	0.427						0		30	
Hexachloro-1,3-butadiene	ND	0.0427						0		30	
1,2,3-Trichlorobenzene	ND	0.0171						0		30	
Surr: Dibromofluoromethane	1.06		1.068		99.1	80	116		0		

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005069-017BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184667**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	1.07		1.068		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.04		1.068		97.9	82.8	113		0		

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2005214-026BDUP** SampType: **DUP** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184671**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0177						0		30	
Chloromethane	ND	0.0441						0		30	
Vinyl chloride	ND	0.0221						0		30	
Bromomethane	ND	0.0441						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0177						0		30	
Chloroethane	ND	0.0441						0		30	
1,1-Dichloroethene	ND	0.0177						0		30	
Methylene chloride	ND	0.0177						0		30	
trans-1,2-Dichloroethene	ND	0.0177						0		30	
1,1-Dichloroethane	ND	0.0177						0		30	
cis-1,2-Dichloroethene	ND	0.0177						0		30	
Chloroform	ND	0.0177						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0221						0		30	
1,1-Dichloropropene	ND	0.0177						0		30	
Carbon tetrachloride	ND	0.0441						0		30	
1,2-Dichloroethane (EDC)	ND	0.0177						0		30	
Trichloroethene (TCE)	ND	0.0177						0		30	
1,2-Dichloropropane	ND	0.0177						0		30	
Bromodichloromethane	ND	0.0177						0		30	
Dibromomethane	ND	0.0177						0		30	
cis-1,3-Dichloropropene	ND	0.0177						0		30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-026BDUP** SampType: **DUP** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184671**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0177						0		30	
1,1,2-Trichloroethane	ND	0.0177						0		30	
1,3-Dichloropropane	ND	0.0221						0		30	
Tetrachloroethene (PCE)	ND	0.0221						0		30	
Dibromochloromethane	ND	0.0221						0		30	
1,2-Dibromoethane (EDB)	ND	0.00441						0		30	
Chlorobenzene	ND	0.0221						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0221						0		30	
Bromoform	ND	0.0441						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0177						0		30	
Bromobenzene	ND	0.0177						0		30	
2-Chlorotoluene	ND	0.0221						0		30	
4-Chlorotoluene	ND	0.0221						0		30	
1,2,3-Trichloropropane	ND	0.0221						0		30	
1,2,4-Trichlorobenzene	ND	0.0221						0		30	
1,3-Dichlorobenzene	ND	0.0177						0		30	*
1,4-Dichlorobenzene	ND	0.0177						0		30	*
1,2-Dichlorobenzene	ND	0.0177						0		30	*
1,2-Dibromo-3-chloropropane	ND	0.441						0		30	
Hexachloro-1,3-butadiene	ND	0.0441						0		30	
1,2,3-Trichlorobenzene	ND	0.0177						0		30	
Surr: Dibromofluoromethane	1.15		1.104		104	80	116		0		
Surr: Toluene-d8	1.12		1.104		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.09		1.104		98.6	82.8	113		0		

NOTES:
* - Flagged value is not within established control limits.

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMS** SampType: **MS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184673**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.841	0.0186	0.9294	0	90.4	-0.64	180				
Chloromethane	0.882	0.0465	0.9294	0	94.9	33.2	162				
Vinyl chloride	0.884	0.0232	0.9294	0	95.1	47.2	146				
Bromomethane	0.949	0.0465	0.9294	0	102	18.7	226				
Trichlorofluoromethane (CFC-11)	0.847	0.0186	0.9294	0	91.1	48.9	158				
Chloroethane	0.968	0.0465	0.9294	0	104	20.8	195				
1,1-Dichloroethene	0.883	0.0186	0.9294	0	95.0	67.1	135				
Methylene chloride	0.933	0.0186	0.9294	0	100	64.9	137				
trans-1,2-Dichloroethene	0.907	0.0186	0.9294	0	97.5	75.1	126				
1,1-Dichloroethane	0.938	0.0186	0.9294	0	101	68.4	132				
cis-1,2-Dichloroethene	0.989	0.0186	0.9294	0.04170	102	76.2	125				
Chloroform	0.932	0.0186	0.9294	0	100	74.5	127				
1,1,1-Trichloroethane (TCA)	0.898	0.0232	0.9294	0	96.6	74.5	126				
1,1-Dichloropropene	0.885	0.0186	0.9294	0	95.3	70.7	128				
Carbon tetrachloride	0.883	0.0465	0.9294	0	95.0	72.5	126				
1,2-Dichloroethane (EDC)	0.961	0.0186	0.9294	0	103	70.4	128				
Trichloroethene (TCE)	0.910	0.0186	0.9294	0	97.9	64.7	145				
1,2-Dichloropropane	0.940	0.0186	0.9294	0	101	69.3	129				
Bromodichloromethane	0.934	0.0186	0.9294	0	100	75.9	120				
Dibromomethane	0.970	0.0186	0.9294	0	104	78.5	123				
cis-1,3-Dichloropropene	0.878	0.0186	0.9294	0	94.5	67.3	122				
trans-1,3-Dichloropropylene	0.869	0.0186	0.9294	0	93.5	64.4	124				
1,1,2-Trichloroethane	0.927	0.0186	0.9294	0	99.7	72.4	129				
1,3-Dichloropropane	0.945	0.0232	0.9294	0	102	70.5	128				
Tetrachloroethene (PCE)	0.870	0.0232	0.9294	0	93.6	64.9	140				
Dibromochloromethane	0.946	0.0232	0.9294	0	102	71.8	125				
1,2-Dibromoethane (EDB)	0.941	0.00465	0.9294	0	101	73.8	126				
Chlorobenzene	0.902	0.0232	0.9294	0	97.1	85.1	118				
1,1,1,2-Tetrachloroethane	0.885	0.0232	0.9294	0	95.2	82.2	118				

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMS** SampType: **MS** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184673**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.881	0.0465	0.9294	0	94.8	66.1	130				
1,1,2,2-Tetrachloroethane	0.933	0.0186	0.9294	0	100	41.2	150				
Bromobenzene	0.904	0.0186	0.9294	0	97.3	84.6	121				
2-Chlorotoluene	0.886	0.0232	0.9294	0	95.3	78.4	128				
4-Chlorotoluene	0.901	0.0232	0.9294	0	97.0	81.2	123				
1,2,3-Trichloropropane	0.975	0.0232	0.9294	0	105	66.4	132				
1,2,4-Trichlorobenzene	0.886	0.0232	0.9294	0	95.3	68.9	139				
1,3-Dichlorobenzene	0.834	0.0186	0.9294	0	89.8	87.8	120				
1,4-Dichlorobenzene	0.828	0.0186	0.9294	0	89.1	88.1	119				
1,2-Dichlorobenzene	0.851	0.0186	0.9294	0	91.6	88.1	120				
1,2-Dibromo-3-chloropropane	0.877	0.465	0.9294	0	94.3	56.6	144				
Hexachloro-1,3-butadiene	0.885	0.0465	0.9294	0	95.2	64.8	148				
1,2,3-Trichlorobenzene	0.889	0.0186	0.9294	0	95.7	59.3	150				
Surr: Dibromofluoromethane	1.27		1.162		109	80	116				
Surr: Toluene-d8	1.19		1.162		102	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.162		103	82.8	113				

Sample ID: **2005214-028BMSD** SampType: **MSD** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184674**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.853	0.0186	0.9294	0	91.8	-0.64	180	0.8406	1.50	30	
Chloromethane	0.920	0.0465	0.9294	0	98.9	33.2	162	0.8824	4.12	30	
Vinyl chloride	0.890	0.0232	0.9294	0	95.8	47.2	146	0.8842	0.660	30	
Bromomethane	0.899	0.0465	0.9294	0	96.8	18.7	226	0.9493	5.39	30	
Trichlorofluoromethane (CFC-11)	0.849	0.0186	0.9294	0	91.3	48.9	158	0.8470	0.203	30	
Chloroethane	1.01	0.0465	0.9294	0	109	20.8	195	0.9683	4.22	30	
1,1-Dichloroethene	0.883	0.0186	0.9294	0	95.0	67.1	135	0.8826	0.0751	30	
Methylene chloride	0.972	0.0186	0.9294	0	105	64.9	137	0.9329	4.13	30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMSD** SampType: **MSD** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184674**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	0.902	0.0186	0.9294	0	97.0	75.1	126	0.9066	0.534	30	
1,1-Dichloroethane	0.942	0.0186	0.9294	0	101	68.4	132	0.9375	0.507	30	
cis-1,2-Dichloroethene	0.969	0.0186	0.9294	0.04170	99.7	76.2	125	0.9893	2.12	30	
Chloroform	0.939	0.0186	0.9294	0	101	74.5	127	0.9322	0.684	30	
1,1,1-Trichloroethane (TCA)	0.899	0.0232	0.9294	0	96.7	74.5	126	0.8982	0.0881	30	
1,1-Dichloropropene	0.863	0.0186	0.9294	0	92.8	70.7	128	0.8854	2.61	30	
Carbon tetrachloride	0.887	0.0465	0.9294	0	95.4	72.5	126	0.8828	0.484	30	
1,2-Dichloroethane (EDC)	0.950	0.0186	0.9294	0	102	70.4	128	0.9614	1.19	30	
Trichloroethene (TCE)	0.902	0.0186	0.9294	0	97.0	64.7	145	0.9100	0.912	30	
1,2-Dichloropropane	0.925	0.0186	0.9294	0	99.5	69.3	129	0.9402	1.65	30	
Bromodichloromethane	0.950	0.0186	0.9294	0	102	75.9	120	0.9338	1.77	30	
Dibromomethane	0.967	0.0186	0.9294	0	104	78.5	123	0.9705	0.399	30	
cis-1,3-Dichloropropene	0.867	0.0186	0.9294	0	93.2	67.3	122	0.8781	1.31	30	
trans-1,3-Dichloropropylene	0.868	0.0186	0.9294	0	93.4	64.4	124	0.8688	0.0743	30	
1,1,2-Trichloroethane	0.933	0.0186	0.9294	0	100	72.4	129	0.9267	0.676	30	
1,3-Dichloropropane	0.934	0.0232	0.9294	0	101	70.5	128	0.9447	1.10	30	
Tetrachloroethene (PCE)	0.860	0.0232	0.9294	0	92.5	64.9	140	0.8700	1.16	30	
Dibromochloromethane	0.945	0.0232	0.9294	0	102	71.8	125	0.9462	0.142	30	
1,2-Dibromoethane (EDB)	0.940	0.00465	0.9294	0	101	73.8	126	0.9408	0.0314	30	
Chlorobenzene	0.907	0.0232	0.9294	0	97.6	85.1	118	0.9023	0.500	30	
1,1,1,2-Tetrachloroethane	0.906	0.0232	0.9294	0	97.5	82.2	118	0.8848	2.35	30	
Bromoform	0.905	0.0465	0.9294	0	97.4	66.1	130	0.8811	2.73	30	
1,1,2,2-Tetrachloroethane	0.958	0.0186	0.9294	0	103	41.2	150	0.9329	2.61	30	
Bromobenzene	0.938	0.0186	0.9294	0	101	84.6	121	0.9040	3.74	30	
2-Chlorotoluene	0.915	0.0232	0.9294	0	98.4	78.4	128	0.8860	3.22	30	
4-Chlorotoluene	0.925	0.0232	0.9294	0	99.5	81.2	123	0.9012	2.61	30	
1,2,3-Trichloropropane	0.951	0.0232	0.9294	0	102	66.4	132	0.9747	2.50	30	
1,2,4-Trichlorobenzene	0.892	0.0232	0.9294	0	96.0	68.9	139	0.8861	0.653	30	
1,3-Dichlorobenzene	0.843	0.0186	0.9294	0	90.7	87.8	120	0.8343	1.06	30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005214-028BMSD** SampType: **MSD** Units: **mg/Kg** Prep Date: **5/19/2020** RunNo: **59275**
Client ID: **BATCH** Batch ID: **28369** Analysis Date: **5/20/2020** SeqNo: **1184674**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.830	0.0186	0.9294	0	89.3	88.1	119	0.8283	0.177	30	
1,2-Dichlorobenzene	0.862	0.0186	0.9294	0	92.8	88.1	120	0.8511	1.32	30	
1,2-Dibromo-3-chloropropane	0.969	0.465	0.9294	0	104	56.6	144	0.8765	10.0	30	
Hexachloro-1,3-butadiene	0.885	0.0465	0.9294	0	95.2	64.8	148	0.8845	0.0647	30	
1,2,3-Trichlorobenzene	0.902	0.0186	0.9294	0	97.1	59.3	150	0.8893	1.43	30	
Surr: Dibromofluoromethane	1.28		1.162		110	80	116		0		
Surr: Toluene-d8	1.17		1.162		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.22		1.162		105	82.8	113		0		

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28305** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **LCSS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182320**

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	21.6	169				
Chloromethane	0.985	0.0500	1.000	0	98.5	45.3	153				
Vinyl chloride	0.970	0.0250	1.000	0	97.0	57.5	137				
Bromomethane	1.28	0.0500	1.000	0	128	32.8	194				
Trichlorofluoromethane (CFC-11)	1.06	0.0200	1.000	0	106	54.3	152				
Chloroethane	0.925	0.0500	1.000	0	92.5	52	146				
1,1-Dichloroethene	1.04	0.0200	1.000	0	104	62.8	139				
Methylene chloride	1.00	0.0200	1.000	0	100	78.4	118				
trans-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	82	117				
1,1-Dichloroethane	0.973	0.0200	1.000	0	97.3	78	119				
cis-1,2-Dichloroethene	0.993	0.0200	1.000	0	99.3	81.9	116				
Chloroform	1.00	0.0200	1.000	0	100	80.8	117				
1,1,1-Trichloroethane (TCA)	1.00	0.0250	1.000	0	100	81.4	117				
1,1-Dichloropropene	0.997	0.0200	1.000	0	99.7	79.9	117				
Carbon tetrachloride	1.02	0.0500	1.000	0	102	80.4	117				
1,2-Dichloroethane (EDC)	0.988	0.0200	1.000	0	98.8	77.5	117				
Trichloroethene (TCE)	1.00	0.0200	1.000	0	100	83.4	115				
1,2-Dichloropropane	0.937	0.0200	1.000	0	93.7	77.6	117				
Bromodichloromethane	0.967	0.0200	1.000	0	96.7	78.9	116				
Dibromomethane	0.951	0.0200	1.000	0	95.1	81.2	115				
cis-1,3-Dichloropropene	0.939	0.0200	1.000	0	93.9	78	115				
trans-1,3-Dichloropropylene	0.916	0.0200	1.000	0	91.6	75.7	117				
1,1,2-Trichloroethane	0.935	0.0200	1.000	0	93.5	77.9	118				
1,3-Dichloropropane	0.933	0.0250	1.000	0	93.3	77.1	118				
Tetrachloroethene (PCE)	0.982	0.0250	1.000	0	98.2	84.3	117				
Dibromochloromethane	0.921	0.0250	1.000	0	92.1	77.9	118				
1,2-Dibromoethane (EDB)	0.933	0.00500	1.000	0	93.3	78.6	117				
Chlorobenzene	0.997	0.0250	1.000	0	99.7	86.5	113				
1,1,1,2-Tetrachloroethane	0.991	0.0250	1.000	0	99.1	84.8	113				

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28305** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **LCSS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182320**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.914	0.0500	1.000	0	91.4	70.7	125				
1,1,2,2-Tetrachloroethane	0.883	0.0200	1.000	0	88.3	68.3	125				
Bromobenzene	0.977	0.0200	1.000	0	97.7	84	117				
2-Chlorotoluene	1.01	0.0250	1.000	0	101	80.4	122				
4-Chlorotoluene	1.00	0.0250	1.000	0	100	83.1	118				
1,2,3-Trichloropropane	0.907	0.0250	1.000	0	90.7	71	125				
1,2,4-Trichlorobenzene	1.00	0.0250	1.000	0	100	81	126				
1,3-Dichlorobenzene	1.03	0.0200	1.000	0	103	90.4	115				
1,4-Dichlorobenzene	1.02	0.0200	1.000	0	102	90.3	115				
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	90.3	115				
1,2-Dibromo-3-chloropropane	0.955	0.500	1.000	0	95.5	62.3	136				
Hexachloro-1,3-butadiene	1.01	0.0500	1.000	0	101	77.8	133				
1,2,3-Trichlorobenzene	0.971	0.0200	1.000	0	97.1	75.9	130				
Surr: Dibromofluoromethane	1.32		1.250		105	80	116				
Surr: Toluene-d8	1.22		1.250		97.5	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.27		1.250		102	82.8	113				

Sample ID: **MB-28305** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **MBLKS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182321**

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									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28305** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **MBLKS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
Bromobenzene	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									

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28305** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **MBLKS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	1.16		1.250		92.5	80	116				
Surr: Toluene-d8	1.22		1.250		97.8	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.250		95.8	82.8	113				

Sample ID: **2005085-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-15** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0275						0		30	
Chloromethane	ND	0.0688						0		30	
Vinyl chloride	ND	0.0344						0		30	
Bromomethane	ND	0.0688						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0275						0		30	
Chloroethane	ND	0.0688						0		30	
1,1-Dichloroethene	ND	0.0275						0		30	
Methylene chloride	ND	0.0275						0		30	
trans-1,2-Dichloroethene	ND	0.0275						0		30	
1,1-Dichloroethane	ND	0.0275						0		30	
cis-1,2-Dichloroethene	ND	0.0275						0		30	
Chloroform	ND	0.0275						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0344						0		30	
1,1-Dichloropropene	ND	0.0275						0		30	
Carbon tetrachloride	ND	0.0688						0		30	
1,2-Dichloroethane (EDC)	ND	0.0275						0		30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-15** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.0275						0		30	
1,2-Dichloropropane	ND	0.0275						0		30	
Bromodichloromethane	ND	0.0275						0		30	
Dibromomethane	ND	0.0275						0		30	
cis-1,3-Dichloropropene	ND	0.0275						0		30	
trans-1,3-Dichloropropylene	ND	0.0275						0		30	
1,1,2-Trichloroethane	ND	0.0275						0		30	
1,3-Dichloropropane	ND	0.0344						0		30	
Tetrachloroethene (PCE)	ND	0.0344						0		30	
Dibromochloromethane	ND	0.0344						0		30	
1,2-Dibromoethane (EDB)	ND	0.00688						0		30	
Chlorobenzene	ND	0.0344						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0344						0		30	
Bromoform	ND	0.0688						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0275						0		30	
Bromobenzene	ND	0.0275						0		30	
2-Chlorotoluene	ND	0.0344						0		30	
4-Chlorotoluene	ND	0.0344						0		30	
1,2,3-Trichloropropane	ND	0.0344						0		30	
1,2,4-Trichlorobenzene	ND	0.0344						0		30	
1,3-Dichlorobenzene	ND	0.0275						0		30	
1,4-Dichlorobenzene	ND	0.0275						0		30	
1,2-Dichlorobenzene	ND	0.0275						0		30	
1,2-Dibromo-3-chloropropane	ND	0.688						0		30	
Hexachloro-1,3-butadiene	ND	0.0688						0		30	
1,2,3-Trichlorobenzene	ND	0.0275						0		30	
Surr: Dibromofluoromethane	1.70		1.720		99.1	80	116		0		
Surr: Toluene-d8	1.73		1.720		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.68		1.720		97.7	82.8	113		0		

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-15** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2005085-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-20** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.21	0.0235	1.177	0	103	-0.64	180				
Chloromethane	1.25	0.0588	1.177	0	107	33.2	162				
Vinyl chloride	1.28	0.0294	1.177	0	109	47.2	146				
Bromomethane	1.99	0.0588	1.177	0	169	18.7	226				
Trichlorofluoromethane (CFC-11)	1.35	0.0235	1.177	0	114	48.9	158				
Chloroethane	1.44	0.0588	1.177	0	123	20.8	195				
1,1-Dichloroethene	1.33	0.0235	1.177	0	113	67.1	135				
Methylene chloride	1.26	0.0235	1.177	0	107	64.9	137				
trans-1,2-Dichloroethene	1.32	0.0235	1.177	0	113	75.1	126				
1,1-Dichloroethane	1.29	0.0235	1.177	0	110	68.4	132				
cis-1,2-Dichloroethene	1.28	0.0235	1.177	0	109	76.2	125				
Chloroform	1.29	0.0235	1.177	0	110	74.5	127				
1,1,1-Trichloroethane (TCA)	1.33	0.0294	1.177	0	113	74.5	126				
1,1-Dichloropropene	1.33	0.0235	1.177	0	113	70.7	128				
Carbon tetrachloride	1.33	0.0588	1.177	0	113	72.5	126				
1,2-Dichloroethane (EDC)	1.30	0.0235	1.177	0	110	70.4	128				
Trichloroethene (TCE)	1.29	0.0235	1.177	0	109	64.7	145				
1,2-Dichloropropane	1.26	0.0235	1.177	0	107	69.3	129				
Bromodichloromethane	1.26	0.0235	1.177	0	107	75.9	120				
Dibromomethane	1.25	0.0235	1.177	0	106	78.5	123				
cis-1,3-Dichloropropene	1.23	0.0235	1.177	0	104	67.3	122				
trans-1,3-Dichloropropylene	1.18	0.0235	1.177	0	100	64.4	124				
1,1,2-Trichloroethane	1.24	0.0235	1.177	0	106	72.4	129				
1,3-Dichloropropane	1.26	0.0294	1.177	0	107	70.5	128				

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-20** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene (PCE)	1.28	0.0294	1.177	0	109	64.9	140				
Dibromochloromethane	1.20	0.0294	1.177	0	102	71.8	125				
1,2-Dibromoethane (EDB)	1.25	0.00588	1.177	0	106	73.8	126				
Chlorobenzene	1.26	0.0294	1.177	0	107	85.1	118				
1,1,1,2-Tetrachloroethane	1.26	0.0294	1.177	0	107	82.2	118				
Bromoform	1.18	0.0588	1.177	0	100	66.1	130				
1,1,2,2-Tetrachloroethane	1.25	0.0235	1.177	0	106	41.2	150				
Bromobenzene	1.23	0.0235	1.177	0	105	84.6	121				
2-Chlorotoluene	1.24	0.0294	1.177	0	105	78.4	128				
4-Chlorotoluene	1.24	0.0294	1.177	0	106	81.2	123				
1,2,3-Trichloropropane	1.42	0.0294	1.177	0	121	66.4	132				
1,2,4-Trichlorobenzene	1.26	0.0294	1.177	0	107	68.9	139				
1,3-Dichlorobenzene	1.27	0.0235	1.177	0	108	87.8	120				
1,4-Dichlorobenzene	1.26	0.0235	1.177	0	107	88.1	119				
1,2-Dichlorobenzene	1.27	0.0235	1.177	0	108	88.1	120				
1,2-Dibromo-3-chloropropane	1.21	0.588	1.177	0	103	56.6	144				
Hexachloro-1,3-butadiene	1.38	0.0588	1.177	0	117	64.8	148				
1,2,3-Trichlorobenzene	1.29	0.0235	1.177	0	110	59.3	150				
Surr: Dibromofluoromethane	1.58		1.471		107	80	116				
Surr: Toluene-d8	1.49		1.471		101	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.47		1.471		100	82.8	113				

Sample ID: **2005085-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-20** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.20	0.0235	1.177	0	102	-0.64	180	1.211	0.979	30	
Chloromethane	1.29	0.0588	1.177	0	109	33.2	162	1.254	2.57	30	
Vinyl chloride	1.27	0.0294	1.177	0	108	47.2	146	1.278	0.929	30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-20** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	1.83	0.0588	1.177	0	155	18.7	226	1.994	8.76	30	
Trichlorofluoromethane (CFC-11)	1.34	0.0235	1.177	0	114	48.9	158	1.346	0.454	30	
Chloroethane	1.41	0.0588	1.177	0	120	20.8	195	1.442	2.39	30	
1,1-Dichloroethene	1.28	0.0235	1.177	0	109	67.1	135	1.326	3.46	30	
Methylene chloride	1.21	0.0235	1.177	0	103	64.9	137	1.256	3.38	30	
trans-1,2-Dichloroethene	1.28	0.0235	1.177	0	109	75.1	126	1.325	3.29	30	
1,1-Dichloroethane	1.25	0.0235	1.177	0	106	68.4	132	1.290	2.94	30	
cis-1,2-Dichloroethene	1.25	0.0235	1.177	0	106	76.2	125	1.278	2.27	30	
Chloroform	1.26	0.0235	1.177	0	107	74.5	127	1.291	2.15	30	
1,1,1-Trichloroethane (TCA)	1.30	0.0294	1.177	0	110	74.5	126	1.334	2.60	30	
1,1-Dichloropropene	1.33	0.0235	1.177	0	113	70.7	128	1.327	0.250	30	
Carbon tetrachloride	1.31	0.0588	1.177	0	111	72.5	126	1.329	1.25	30	
1,2-Dichloroethane (EDC)	1.25	0.0235	1.177	0	106	70.4	128	1.297	3.83	30	
Trichloroethene (TCE)	1.26	0.0235	1.177	0	107	64.7	145	1.287	2.16	30	
1,2-Dichloropropane	1.23	0.0235	1.177	0	105	69.3	129	1.262	2.41	30	
Bromodichloromethane	1.22	0.0235	1.177	0	104	75.9	120	1.263	3.15	30	
Dibromomethane	1.21	0.0235	1.177	0	103	78.5	123	1.252	3.05	30	
cis-1,3-Dichloropropene	1.19	0.0235	1.177	0	101	67.3	122	1.226	3.16	30	
trans-1,3-Dichloropropylene	1.16	0.0235	1.177	0	98.9	64.4	124	1.182	1.54	30	
1,1,2-Trichloroethane	1.22	0.0235	1.177	0	103	72.4	129	1.242	2.07	30	
1,3-Dichloropropane	1.22	0.0294	1.177	0	103	70.5	128	1.257	3.41	30	
Tetrachloroethene (PCE)	1.26	0.0294	1.177	0	107	64.9	140	1.280	1.69	30	
Dibromochloromethane	1.18	0.0294	1.177	0	100	71.8	125	1.197	1.28	30	
1,2-Dibromoethane (EDB)	1.20	0.00588	1.177	0	102	73.8	126	1.253	4.34	30	
Chlorobenzene	1.25	0.0294	1.177	0	107	85.1	118	1.262	0.589	30	
1,1,1,2-Tetrachloroethane	1.23	0.0294	1.177	0	105	82.2	118	1.263	2.40	30	
Bromoform	1.14	0.0588	1.177	0	96.9	66.1	130	1.178	3.23	30	
1,1,2,2-Tetrachloroethane	1.26	0.0235	1.177	0	107	41.2	150	1.253	0.312	30	
Bromobenzene	1.23	0.0235	1.177	0	104	84.6	121	1.231	0.137	30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B4-20** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	1.23	0.0294	1.177	0	104	78.4	128	1.241	0.969	30	
4-Chlorotoluene	1.24	0.0294	1.177	0	105	81.2	123	1.243	0.382	30	
1,2,3-Trichloropropane	1.42	0.0294	1.177	0	121	66.4	132	1.419	0.0349	30	
1,2,4-Trichlorobenzene	1.27	0.0294	1.177	0	108	68.9	139	1.261	0.295	30	
1,3-Dichlorobenzene	1.27	0.0235	1.177	0	108	87.8	120	1.270	0.290	30	
1,4-Dichlorobenzene	1.26	0.0235	1.177	0	107	88.1	119	1.258	0.561	30	
1,2-Dichlorobenzene	1.27	0.0235	1.177	0	108	88.1	120	1.270	0.128	30	
1,2-Dibromo-3-chloropropane	1.25	0.588	1.177	0	106	56.6	144	1.208	3.58	30	
Hexachloro-1,3-butadiene	1.38	0.0588	1.177	0	117	64.8	148	1.377	0.298	30	
1,2,3-Trichlorobenzene	1.29	0.0235	1.177	0	110	59.3	150	1.293	0.0884	30	
Surr: Dibromofluoromethane	1.56		1.471		106	80	116		0		
Surr: Toluene-d8	1.46		1.471		99.3	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.47		1.471		100	82.8	113		0		

Sample ID: **2005098-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182308**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0185						0		30	
Chloromethane	ND	0.0463						0		30	
Vinyl chloride	ND	0.0231						0		30	
Bromomethane	ND	0.0463						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0185						0		30	
Chloroethane	ND	0.0463						0		30	
1,1-Dichloroethene	ND	0.0185						0		30	
Methylene chloride	ND	0.0185						0		30	
trans-1,2-Dichloroethene	ND	0.0185						0		30	
1,1-Dichloroethane	ND	0.0185						0		30	
cis-1,2-Dichloroethene	0.0529	0.0185						0.05089	3.80	30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005098-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182308**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.0185						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0231						0		30	
1,1-Dichloropropene	ND	0.0185						0		30	
Carbon tetrachloride	ND	0.0463						0		30	
1,2-Dichloroethane (EDC)	ND	0.0185						0		30	
Trichloroethene (TCE)	ND	0.0185						0		30	
1,2-Dichloropropane	ND	0.0185						0		30	
Bromodichloromethane	ND	0.0185						0		30	
Dibromomethane	ND	0.0185						0		30	
cis-1,3-Dichloropropene	ND	0.0185						0		30	
trans-1,3-Dichloropropylene	ND	0.0185						0		30	
1,1,2-Trichloroethane	ND	0.0185						0		30	
1,3-Dichloropropane	ND	0.0231						0		30	
Tetrachloroethene (PCE)	0.0437	0.0231						0.04384	0.310	30	
Dibromochloromethane	ND	0.0231						0		30	
1,2-Dibromoethane (EDB)	ND	0.00463						0		30	
Chlorobenzene	ND	0.0231						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0231						0		30	
Bromoform	ND	0.0463						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0185						0		30	
Bromobenzene	ND	0.0185						0		30	
2-Chlorotoluene	ND	0.0231						0		30	
4-Chlorotoluene	ND	0.0231						0		30	
1,2,3-Trichloropropane	ND	0.0231						0		30	
1,2,4-Trichlorobenzene	ND	0.0231						0		30	
1,3-Dichlorobenzene	ND	0.0185						0		30	
1,4-Dichlorobenzene	ND	0.0185						0		30	
1,2-Dichlorobenzene	ND	0.0185						0		30	
1,2-Dibromo-3-chloropropane	ND	0.463						0		30	

Work Order: 2005085
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005098-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182308**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	ND	0.0463						0		30	
1,2,3-Trichlorobenzene	ND	0.0185						0		30	
Surr: Dibromofluoromethane	1.11		1.157		95.7	80	116		0		
Surr: Toluene-d8	1.14		1.157		98.4	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.12		1.157		96.5	82.8	113		0		

Sample Log-In Check List

Client Name:	**ONEILL**	Work Order Number:	**2005085**
Logged by:	**Carissa True**	Date Received:	**5/8/2020 4:27:00 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 >2°C to 6°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:

Temp Blank out of temp

Item Information

Item #	Temp ºC
Cooler 1	0.9
Sample 1	1.0
Temp Blank 1	11.9

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

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

Chain of Custody Record & Laboratory Services Agreement

Date: 5/8/20 | Page: 1 of: 3 | Laboratory Project No (internal): 2005085

Project Name: 2021 | Special Remarks:

Client: OH | Project No: F200

Address: | Collected by: ATK

City, State, Zip: | Location: Fuss

Telephone: | Report To (PM): ATK

Fax: | PM Email:

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

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	~~358-B3-9.5~~	~~5/8/20~~	~~8??~~	GW	X													
2	358-B4-5-5		820	S														
3	-4-10		830															
4	-4-12.5		855															
5	-15		905		X													
6	-20		910		X													
7	-25		915															
8	358-B5-2.5		1030															
9	-15		1040		X													
10	-7.5		1045															

*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

Turn-around Time:
- ☑ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

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 [signature]	5/8/20 1612	x [signature]	5/8/20 @ 1627
Relinquished	Date/Time	Received	Date/Time
x		x	

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: 5/8/20 | Page: 2 of: 3 | Laboratory Project No (internal): 2005035

Project Name: F200

Project No: F2021

Collected by: ATKins

Location: F200

Report To (PM): ATKins

PM Email:

Special Remarks:

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

Client: OSF

Address:

City, State, Zip:

Telephone:

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	358-B5-~~12.5~~ 10		1050	S	X													
2	-12.5		1055															
3	-15		1100															
4	-20		1110		X													
5	-25		1120															
6	~~358-B4-Gas~~		1235															
7	358-B6-~~8~~5		1305		X													
8	-7.5		1310															
9	-10		1320		X													
10	-12.5		1325															

*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

Turn-around Time:

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

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 [signature]	5/8/20 1612	x [signature]	5/9/20 @ 1627
Relinquished	Date/Time	Received	Date/Time
x		x	

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: 5/8/20 Page: 3 of: 3

Project Name: P200

Project No: EE2021

Collected by: ATK, MJ

Location: FL358

Report To (PM): ATK, MJ

PM Email:

Laboratory Project No (internal): 20050985

Special Remarks:

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

Client: 039

Address:

City, State, Zip:

Telephone:

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	358-TB-20150	5/8/20	1335	S													
2	-20		1340		X												
3	-25		1345														
4	~~358-BS-20~~		~~1430~~	~~GW~~													
5																	
6																	
7																	
8																	
9																	
10																	

*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	5/8/20 1652	x	5/8/20 @ 1627
x		x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

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

Chain of Custody Record & Laboratory Services Agreement

Date: 5/8/20 | Page: 2 of: 3 | Laboratory Project No (internal): 2005035

Project Name: F200

Project No: #2021

Collected by: ARKing

Location: F200

Report To (PM): ARKing

Special Remarks: ⊗Add per V.A. 5/19/20 Next Day cgr

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

Client: OSF

Address:

City, State, Zip:

Telephone:

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	BTEXVOCs (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)	Comments
1	358-B5-~~12.5~~ 10		1050	S	X													
2	- 12.5		1055															
3	- 15		1100		⊗													
4	- 20		1110		X													
5	- 25		1120		⊗													
6	~~358-B5-Qw~~		~~1125~~															
7	358-B6-~~8.5~~ 5		1305		X													
8	- 7.5		1310															
9	- 10		1320		X													
10	- 12.5		1325															

*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

Turn-around Time:
- ☑ ~~Standard~~
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day (specify)

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 [signature]	5/8/20 1612	x [signature]	5/8/20 @ 1627
Relinquished	Date/Time	Received	Date/Time
x		x	

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

O'Neill Service Group
Vance Atkins
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: F200
Work Order Number: 2005086

May 15, 2020

Attention Vance Atkins:

Fremont Analytical, Inc. received 4 sample(s) on 5/8/2020 for the analyses presented in the following report.

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: *05/15/2020*

CLIENT: O'Neill Service Group
Project: F200
Work Order: 2005086

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2005086-001	358-B3-GW	05/08/2020 8:15 AM	05/08/2020 4:27 PM
2005086-002	358-B4-GW	05/08/2020 12:35 PM	05/08/2020 4:27 PM
2005086-003	358-B5-GW	05/08/2020 2:30 PM	05/08/2020 4:27 PM
2005086-004	Trip Blank	05/01/2020 11:24 AM	05/08/2020 4:27 PM

Case Narrative

WO#: **2005086**
Date: **5/15/2020**

CLIENT: O'Neill Service Group
Project: F200

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: O'Neill Service Group
Collection Date: 5/8/2020 8:15:00 AM
Project: F200
Lab ID: 2005086-001
Matrix: Groundwater
Client Sample ID: 358-B3-GW

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28304 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Chloromethane	ND	2.00		µg/L	1	5/12/2020 2:39:25 PM
Vinyl chloride	ND	0.200		µg/L	1	5/12/2020 2:39:25 PM
Bromomethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Chloroethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Methylene chloride	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
cis-1,2-Dichloroethene	6.41	1.00		µg/L	1	5/12/2020 2:39:25 PM
Chloroform	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Trichloroethene (TCE)	2.08	0.500		µg/L	1	5/12/2020 2:39:25 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Dibromomethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Tetrachloroethene (PCE)	5.71	1.00		µg/L	1	5/12/2020 2:39:25 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/12/2020 2:39:25 PM
Chlorobenzene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Bromoform	ND	2.00		µg/L	1	5/12/2020 2:39:25 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Bromobenzene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/12/2020 2:39:25 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM

Analytical Report

Work Order: **2005086**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 8:15:00 AM
Project: F200
Lab ID: 2005086-001
Matrix: Groundwater
Client Sample ID: 358-B3-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28304		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/12/2020 2:39:25 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/12/2020 2:39:25 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/12/2020 2:39:25 PM
Surr: Dibromofluoromethane	95.7	81.1 - 118		%Rec	1	5/12/2020 2:39:25 PM
Surr: Toluene-d8	99.0	85.7 - 113		%Rec	1	5/12/2020 2:39:25 PM
Surr: 1-Bromo-4-fluorobenzene	99.2	84.2 - 111		%Rec	1	5/12/2020 2:39:25 PM

Client: O'Neill Service Group
Collection Date: 5/8/2020 12:35:00 PM
Project: F200
Lab ID: 2005086-002
Matrix: Groundwater
Client Sample ID: 358-B4-GW

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28304 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Chloromethane	ND	2.00		µg/L	1	5/12/2020 3:09:27 PM
Vinyl chloride	ND	0.200		µg/L	1	5/12/2020 3:09:27 PM
Bromomethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Chloroethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Methylene chloride	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Chloroform	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/12/2020 3:09:27 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Dibromomethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/12/2020 3:09:27 PM
Chlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Bromoform	ND	2.00		µg/L	1	5/12/2020 3:09:27 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Bromobenzene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/12/2020 3:09:27 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM

Analytical Report

Work Order: **2005086**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 12:35:00 PM
Project: F200
Lab ID: 2005086-002
Matrix: Groundwater
Client Sample ID: 358-B4-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28304		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/12/2020 3:09:27 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/12/2020 3:09:27 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/12/2020 3:09:27 PM
Surr: Dibromofluoromethane	96.3	81.1 - 118		%Rec	1	5/12/2020 3:09:27 PM
Surr: Toluene-d8	99.1	85.7 - 113		%Rec	1	5/12/2020 3:09:27 PM
Surr: 1-Bromo-4-fluorobenzene	100	84.2 - 111		%Rec	1	5/12/2020 3:09:27 PM

Client: O'Neill Service Group
Collection Date: 5/8/2020 2:30:00 PM
Project: F200
Lab ID: 2005086-003
Matrix: Groundwater
Client Sample ID: 358-B5-GW

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28304 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Chloromethane	ND	2.00		µg/L	1	5/12/2020 3:39:40 PM
Vinyl chloride	2.20	0.200		µg/L	1	5/12/2020 3:39:40 PM
Bromomethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Chloroethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Methylene chloride	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
cis-1,2-Dichloroethene	68.3	10.0	D	µg/L	10	5/13/2020 10:39:00 AM
Chloroform	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Trichloroethene (TCE)	69.9	5.00	D	µg/L	10	5/13/2020 10:39:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Dibromomethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Tetrachloroethene (PCE)	136	10.0	D	µg/L	10	5/13/2020 10:39:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/12/2020 3:39:40 PM
Chlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Bromoform	ND	2.00		µg/L	1	5/12/2020 3:39:40 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Bromobenzene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/12/2020 3:39:40 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM

Analytical Report

Work Order: **2005086**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/8/2020 2:30:00 PM
Project: F200
Lab ID: 2005086-003
Matrix: Groundwater
Client Sample ID: 358-B5-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28304		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/12/2020 3:39:40 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/12/2020 3:39:40 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/12/2020 3:39:40 PM
Surr: Dibromofluoromethane	96.1	81.1 - 118		%Rec	1	5/12/2020 3:39:40 PM
Surr: Toluene-d8	99.9	85.7 - 113		%Rec	1	5/12/2020 3:39:40 PM
Surr: 1-Bromo-4-fluorobenzene	99.4	84.2 - 111		%Rec	1	5/12/2020 3:39:40 PM

Client: O'Neill Service Group
Collection Date: 5/1/2020 11:24:00 AM
Project: F200
Lab ID: 2005086-004
Matrix: Water
Client Sample ID: **Trip Blank**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28304 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Chloromethane	ND	2.00		µg/L	1	5/12/2020 11:38:17 AM
Vinyl chloride	ND	0.200		µg/L	1	5/12/2020 11:38:17 AM
Bromomethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Chloroethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Methylene chloride	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Chloroform	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Carbon tetrachloride	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/12/2020 11:38:17 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Bromodichloromethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Dibromomethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/12/2020 11:38:17 AM
Chlorobenzene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Bromoform	ND	2.00		µg/L	1	5/12/2020 11:38:17 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Bromobenzene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
2-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
4-Chlorotoluene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/12/2020 11:38:17 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM

Analytical Report

Work Order: **2005086**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/1/2020 11:24:00 AM
Project: F200
Lab ID: 2005086-004
Matrix: Water
Client Sample ID: **Trip Blank**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28304		Analyst: CR
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/12/2020 11:38:17 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/12/2020 11:38:17 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/12/2020 11:38:17 AM
Surr: Dibromofluoromethane	97.6	81.1 - 118		%Rec	1	5/12/2020 11:38:17 AM
Surr: Toluene-d8	99.9	85.7 - 113		%Rec	1	5/12/2020 11:38:17 AM
Surr: 1-Bromo-4-fluorobenzene	99.7	84.2 - 111		%Rec	1	5/12/2020 11:38:17 AM

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28304** SampType: **LCS** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **LCSW** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181677**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.6	1.00	20.00	0	82.9	14.5	175				
Chloromethane	17.0	2.00	20.00	0	85.2	44.8	153				
Vinyl chloride	19.1	0.200	20.00	0	95.3	64.1	131				
Bromomethane	19.5	1.00	20.00	0	97.7	34.2	171				
Trichlorofluoromethane (CFC-11)	19.6	1.00	20.00	0	98.2	77.4	121				
Chloroethane	19.4	1.00	20.00	0	97.1	73.3	123				
1,1-Dichloroethene	20.2	1.00	20.00	0	101	81.8	116				
Methylene chloride	20.5	1.00	20.00	0	102	80.4	116				
trans-1,2-Dichloroethene	20.1	1.00	20.00	0	101	83.1	115				
1,1-Dichloroethane	19.8	1.00	20.00	0	98.8	79.5	119				
cis-1,2-Dichloroethene	20.0	1.00	20.00	0	100	83.5	115				
Chloroform	19.9	1.00	20.00	0	99.4	81	117				
1,1,1-Trichloroethane (TCA)	19.6	1.00	20.00	0	98.0	82.8	116				
1,1-Dichloropropene	20.0	1.00	20.00	0	100	81.5	117				
Carbon tetrachloride	19.9	1.00	20.00	0	99.3	83.3	114				
1,2-Dichloroethane (EDC)	19.7	1.00	20.00	0	98.4	78.4	118				
Trichloroethene (TCE)	20.3	0.500	20.00	0	101	82.2	116				
1,2-Dichloropropane	20.4	1.00	20.00	0	102	78	120				
Bromodichloromethane	19.6	1.00	20.00	0	98.1	80.9	116				
Dibromomethane	20.7	1.00	20.00	0	103	80	117				
cis-1,3-Dichloropropene	20.8	1.00	20.00	0	104	79.8	118				
trans-1,3-Dichloropropylene	20.7	1.00	20.00	0	103	75.8	122				
1,1,2-Trichloroethane	21.2	1.00	20.00	0	106	77.8	120				
1,3-Dichloropropane	21.4	1.00	20.00	0	107	76.5	121				
Tetrachloroethene (PCE)	20.8	1.00	20.00	0	104	86.2	114				
Dibromochloromethane	21.7	1.00	20.00	0	109	78	117				
1,2-Dibromoethane (EDB)	21.2	0.250	20.00	0	106	76.8	120				
Chlorobenzene	20.1	1.00	20.00	0	101	85.2	112				
1,1,1,2-Tetrachloroethane	20.0	1.00	20.00	0	99.9	85.5	110				
Bromoform	21.8	2.00	20.00	0	109	73.4	119				
1,1,2,2-Tetrachloroethane	20.8	1.00	20.00	0	104	74.8	124				

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28304** SampType: **LCS** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **LCSW** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181677**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	20.5	1.00	20.00	0	102	83.2	116				
2-Chlorotoluene	20.3	1.00	20.00	0	101	81.8	119				
4-Chlorotoluene	20.2	1.00	20.00	0	101	81.6	118				
1,2,3-Trichloropropane	20.7	1.00	20.00	0	103	73.2	126				
1,2,4-Trichlorobenzene	19.1	2.00	20.00	0	95.7	68.7	138				
1,3-Dichlorobenzene	20.5	1.00	20.00	0	102	90.7	114				
1,4-Dichlorobenzene	20.7	1.00	20.00	0	104	90.1	114				
1,2-Dichlorobenzene	20.7	1.00	20.00	0	103	90.1	115				
1,2-Dibromo-3-chloropropane	20.8	1.00	20.00	0	104	54.8	147				
Hexachloro-1,3-butadiene	19.5	4.00	20.00	0	97.3	73.6	134				
1,2,3-Trichlorobenzene	19.0	4.00	20.00	0	94.8	57.1	150				
Surr: Dibromofluoromethane	25.3		25.00		101	81.1	118				
Surr: Toluene-d8	24.9		25.00		99.5	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.9		25.00		103	84.2	111				

Sample ID: **LCSD-28304** SampType: **LCSD** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **LCSW02** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	15.5	1.00	20.00	0	77.5	14.5	175	16.58	6.76	20	
Chloromethane	17.6	2.00	20.00	0	88.0	44.8	153	17.03	3.24	20	
Vinyl chloride	19.0	0.200	20.00	0	95.2	64.1	131	19.06	0.0665	20	
Bromomethane	18.5	1.00	20.00	0	92.4	34.2	171	19.53	5.52	20	
Trichlorofluoromethane (CFC-11)	19.7	1.00	20.00	0	98.5	77.4	121	19.64	0.253	20	
Chloroethane	19.4	1.00	20.00	0	97.1	73.3	123	19.42	0.0689	20	
1,1-Dichloroethene	20.4	1.00	20.00	0	102	81.8	116	20.16	1.04	20	
Methylene chloride	20.4	1.00	20.00	0	102	80.4	116	20.46	0.544	20	
trans-1,2-Dichloroethene	20.5	1.00	20.00	0	103	83.1	115	20.15	1.91	20	
1,1-Dichloroethane	19.8	1.00	20.00	0	98.8	79.5	119	19.76	0.0431	20	
cis-1,2-Dichloroethene	19.9	1.00	20.00	0	99.7	83.5	115	20.00	0.263	20	

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-28304** SampType: **LCSD** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **LCSW02** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	19.8	1.00	20.00	0	99.2	81	117	19.87	0.180	20	
1,1,1-Trichloroethane (TCA)	19.6	1.00	20.00	0	98.2	82.8	116	19.59	0.184	20	
1,1-Dichloropropene	20.1	1.00	20.00	0	100	81.5	117	20.03	0.322	20	
Carbon tetrachloride	20.0	1.00	20.00	0	100	83.3	114	19.85	0.707	20	
1,2-Dichloroethane (EDC)	19.4	1.00	20.00	0	97.1	78.4	118	19.68	1.37	20	
Trichloroethene (TCE)	20.4	0.500	20.00	0	102	82.2	116	20.27	0.556	20	
1,2-Dichloropropane	20.4	1.00	20.00	0	102	78	120	20.44	0.384	20	
Bromodichloromethane	19.7	1.00	20.00	0	98.3	80.9	116	19.61	0.223	20	
Dibromomethane	20.3	1.00	20.00	0	102	80	117	20.68	1.60	20	
cis-1,3-Dichloropropene	20.6	1.00	20.00	0	103	79.8	118	20.76	0.593	20	
trans-1,3-Dichloropropylene	20.7	1.00	20.00	0	103	75.8	122	20.68	0.0615	20	
1,1,2-Trichloroethane	21.1	1.00	20.00	0	106	77.8	120	21.20	0.309	20	
1,3-Dichloropropane	20.7	1.00	20.00	0	104	76.5	121	21.36	3.09	20	
Tetrachloroethene (PCE)	20.9	1.00	20.00	0	104	86.2	114	20.83	0.130	20	
Dibromochloromethane	20.9	1.00	20.00	0	105	78	117	21.74	3.80	20	
1,2-Dibromoethane (EDB)	20.8	0.250	20.00	0	104	76.8	120	21.22	2.08	20	
Chlorobenzene	20.1	1.00	20.00	0	101	85.2	112	20.14	0.160	20	
1,1,1,2-Tetrachloroethane	20.1	1.00	20.00	0	101	85.5	110	19.98	0.633	20	
Bromoform	21.9	2.00	20.00	0	110	73.4	119	21.81	0.533	20	
1,1,2,2-Tetrachloroethane	21.7	1.00	20.00	0	108	74.8	124	20.78	4.16	20	
Bromobenzene	20.9	1.00	20.00	0	105	83.2	116	20.49	2.02	20	
2-Chlorotoluene	21.1	1.00	20.00	0	106	81.8	119	20.26	4.13	20	
4-Chlorotoluene	20.0	1.00	20.00	0	99.9	81.6	118	20.21	1.11	20	
1,2,3-Trichloropropane	21.9	1.00	20.00	0	110	73.2	126	20.67	5.80	20	
1,2,4-Trichlorobenzene	20.6	2.00	20.00	0	103	68.7	138	19.15	7.25	20	
1,3-Dichlorobenzene	20.7	1.00	20.00	0	103	90.7	114	20.50	0.752	20	
1,4-Dichlorobenzene	20.8	1.00	20.00	0	104	90.1	114	20.75	0.00988	20	
1,2-Dichlorobenzene	20.8	1.00	20.00	0	104	90.1	115	20.69	0.462	20	
1,2-Dibromo-3-chloropropane	21.1	1.00	20.00	0	106	54.8	147	20.84	1.26	20	
Hexachloro-1,3-butadiene	21.0	4.00	20.00	0	105	73.6	134	19.47	7.64	20	
1,2,3-Trichlorobenzene	20.4	4.00	20.00	0	102	57.1	150	18.95	7.13	20	

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-28304** SampType: **LCSD** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **LCSW02** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181678**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	25.3		25.00		101	81.1	118		0		
Surr: Toluene-d8	24.8		25.00		99.2	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	27.0		25.00		108	84.2	111		0		

Sample ID: **MB-28304** SampType: **MBLK** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **MBLKW** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181679**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
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									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28304** SampType: **MBLK** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **MBLKW** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181679**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Bromoform	ND	2.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
Bromobenzene	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	24.0		25.00		95.9	81.1	118				
Surr: Toluene-d8	24.6		25.00		98.4	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.0		25.00		99.8	84.2	111				

Sample ID: **2005046-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **BATCH** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181636**

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: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005046-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **BATCH** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181636**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						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	
Dibromomethane	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	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005046-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **BATCH** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181636**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	24.3		25.00		97.2	81.1	118		0		
Surr: Toluene-d8	24.7		25.00		98.8	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00		98.9	84.2	111		0		

Sample ID: **2005047-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **BATCH** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181638**

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	
Bromomethane	ND	1.00						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	

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005047-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **BATCH** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181638**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	
Dibromomethane	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	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
Bromobenzene	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	24.0		25.00		96.0	81.1	118		0		
Surr: Toluene-d8	24.8		25.00		99.0	85.7	113		0		

Work Order: 2005086
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005047-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2020** RunNo: **59146**
Client ID: **BATCH** Batch ID: **28304** Analysis Date: **5/12/2020** SeqNo: **1181638**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00		99.0	84.2	111		0		

Sample Log-In Check List

Client Name:	**ONEILL**	Work Order Number:	**2005086**
Logged by:	**Carissa True**	Date Received:	**5/8/2020 4:27:00 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 >2°C to 6°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:

Temp Blank out of temp

Item Information

Item #	Temp ºC
Cooler 1	0.9
Sample 1	1.0
Temp Blank 1	11.9

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

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

Chain of Custody Record & Laboratory Services Agreement

Date: 5/8/20 Page: 1 of: 1

Laboratory Project No (internal): 2005086

Project Name: ~~208~~ Ford

Special Remarks:

Client: 039

Project No: 221

Address:

Collected by: ATK-J

City, State, Zip:

Location: FL358 - GW

Telephone:

Report To (PM): ATK-J

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

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	358-B3-GW	5/8/15	815	GW	X														
2	358-B4-GW	"	1235	"	X														
3	358-B5-GW	"	1430	"	X														
4	TRIP BLANK	—	—	—	X														
5																			
6																			
7																			
8																			
9																			
10																			

*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	5/8/20 1612	x	5/8/20 @1627
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:

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

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

O'Neill Service Group
Vance Atkins
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: F200
Work Order Number: 2005098

May 15, 2020

Attention Vance Atkins:

Fremont Analytical, Inc. received 22 sample(s) on 5/11/2020 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: *05/15/2020*

CLIENT: O'Neill Service Group
Project: F200
Work Order: 2005098

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2005098-001	358-B7-5	05/11/2020 8:25 AM	05/11/2020 4:45 PM
2005098-002	358-B7-7.5	05/11/2020 8:30 AM	05/11/2020 4:45 PM
2005098-003	358-B7-10	05/11/2020 8:45 AM	05/11/2020 4:45 PM
2005098-004	358-B7-15	05/11/2020 8:55 AM	05/11/2020 4:45 PM
2005098-005	358-B7-20	05/11/2020 9:05 AM	05/11/2020 4:45 PM
2005098-006	358-B7-25	05/11/2020 9:10 AM	05/11/2020 4:45 PM
2005098-007	358-B8-2.5	05/11/2020 10:30 AM	05/11/2020 4:45 PM
2005098-008	358-B8-5	05/11/2020 10:35 AM	05/11/2020 4:45 PM
2005098-009	358-B8-7.5	05/11/2020 10:40 AM	05/11/2020 4:45 PM
2005098-010	358-B8-10	05/11/2020 10:45 AM	05/11/2020 4:45 PM
2005098-011	358-B8-12.5	05/11/2020 10:50 AM	05/11/2020 4:45 PM
2005098-012	358-B8-15	05/11/2020 11:00 AM	05/11/2020 4:45 PM
2005098-013	358-B8-20	05/11/2020 11:05 AM	05/11/2020 4:45 PM
2005098-014	358-B8-25	05/11/2020 11:15 AM	05/11/2020 4:45 PM
2005098-015	358-B9-2.5	05/11/2020 1:15 PM	05/11/2020 4:45 PM
2005098-016	358-B9-7.5	05/11/2020 1:30 PM	05/11/2020 4:45 PM
2005098-017	358-B9-10	05/11/2020 1:35 PM	05/11/2020 4:45 PM
2005098-018	358-B9-12.5	05/11/2020 1:40 PM	05/11/2020 4:45 PM
2005098-019	358-B9-15	05/11/2020 1:45 PM	05/11/2020 4:45 PM
2005098-020	358-B9-20	05/11/2020 1:50 PM	05/11/2020 4:45 PM
2005098-021	358-B9-25	05/11/2020 2:00 PM	05/11/2020 4:45 PM
2005098-022	Trip Blank	05/06/2020 12:40 PM	05/11/2020 4:45 PM

Case Narrative

WO#: **2005098**
Date: **5/15/2020**

CLIENT: O'Neill Service Group
Project: F200

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: O'Neill Service Group
Collection Date: 5/11/2020 8:25:00 AM
Project: F200
Lab ID: 2005098-001
Matrix: Soil
Client Sample ID: 358-B7-5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Chloromethane	ND	0.0463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Vinyl chloride	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Bromomethane	ND	0.0463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Trichlorofluoromethane (CFC-11)	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Chloroethane	ND	0.0463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1-Dichloroethene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Methylene chloride	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
trans-1,2-Dichloroethene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1-Dichloroethane	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
cis-1,2-Dichloroethene	0.0509	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Chloroform	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1,1-Trichloroethane (TCA)	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1-Dichloropropene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Carbon tetrachloride	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2-Dichloroethane (EDC)	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Trichloroethene (TCE)	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2-Dichloropropane	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Bromodichloromethane	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Dibromomethane	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
cis-1,3-Dichloropropene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
trans-1,3-Dichloropropylene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1,2-Trichloroethane	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,3-Dichloropropane	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Tetrachloroethene (PCE)	0.0438	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Dibromochloromethane	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2-Dibromoethane (EDB)	ND	0.00463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Chlorobenzene	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1,1,2-Tetrachloroethane	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Bromoform	ND	0.0463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,1,2,2-Tetrachloroethane	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Bromobenzene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
2-Chlorotoluene	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
4-Chlorotoluene	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2,3-Trichloropropane	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2,4-Trichlorobenzene	ND	0.0231		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,3-Dichlorobenzene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,4-Dichlorobenzene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2-Dichlorobenzene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 8:25:00 AM
Project: F200
Lab ID: 2005098-001
Matrix: Soil
Client Sample ID: 358-B7-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Hexachloro-1,3-butadiene	ND	0.0463		mg/Kg-dry	1	5/12/2020 6:34:15 PM
1,2,3-Trichlorobenzene	ND	0.0185		mg/Kg-dry	1	5/12/2020 6:34:15 PM
Surr: Dibromofluoromethane	96.5	80 - 116		%Rec	1	5/12/2020 6:34:15 PM
Surr: Toluene-d8	99.1	84.8 - 113		%Rec	1	5/12/2020 6:34:15 PM
Surr: 1-Bromo-4-fluorobenzene	96.6	82.8 - 113		%Rec	1	5/12/2020 6:34:15 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	13.1	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 8:45:00 AM
Project: F200
Lab ID: 2005098-003
Matrix: Soil
Client Sample ID: 358-B7-10

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Chloromethane	ND	0.0435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Vinyl chloride	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Bromomethane	ND	0.0435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Trichlorofluoromethane (CFC-11)	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Chloroethane	ND	0.0435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1-Dichloroethene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Methylene chloride	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
trans-1,2-Dichloroethene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1-Dichloroethane	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
cis-1,2-Dichloroethene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Chloroform	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1,1-Trichloroethane (TCA)	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1-Dichloropropene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Carbon tetrachloride	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2-Dichloroethane (EDC)	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Trichloroethene (TCE)	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2-Dichloropropane	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Bromodichloromethane	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Dibromomethane	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
cis-1,3-Dichloropropene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
trans-1,3-Dichloropropylene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1,2-Trichloroethane	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,3-Dichloropropane	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Tetrachloroethene (PCE)	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Dibromochloromethane	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2-Dibromoethane (EDB)	ND	0.00435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Chlorobenzene	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1,1,2-Tetrachloroethane	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Bromoform	ND	0.0435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,1,2,2-Tetrachloroethane	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Bromobenzene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
2-Chlorotoluene	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
4-Chlorotoluene	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2,3-Trichloropropane	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2,4-Trichlorobenzene	ND	0.0218		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,3-Dichlorobenzene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,4-Dichlorobenzene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2-Dichlorobenzene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 8:45:00 AM
Project: F200
Lab ID: 2005098-003
Matrix: Soil
Client Sample ID: 358-B7-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Hexachloro-1,3-butadiene	ND	0.0435		mg/Kg-dry	1	5/12/2020 7:34:31 PM
1,2,3-Trichlorobenzene	ND	0.0174		mg/Kg-dry	1	5/12/2020 7:34:31 PM
Surr: Dibromofluoromethane	97.5	80 - 116		%Rec	1	5/12/2020 7:34:31 PM
Surr: Toluene-d8	98.9	84.8 - 113		%Rec	1	5/12/2020 7:34:31 PM
Surr: 1-Bromo-4-fluorobenzene	96.5	82.8 - 113		%Rec	1	5/12/2020 7:34:31 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	12.5	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 9:05:00 AM
Project: F200
Lab ID: 2005098-005
Matrix: Soil
Client Sample ID: **358-B7-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Chloromethane	ND	0.0426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Vinyl chloride	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Bromomethane	ND	0.0426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Trichlorofluoromethane (CFC-11)	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Chloroethane	ND	0.0426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1-Dichloroethene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Methylene chloride	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
trans-1,2-Dichloroethene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1-Dichloroethane	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
cis-1,2-Dichloroethene	0.0245	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Chloroform	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1,1-Trichloroethane (TCA)	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1-Dichloropropene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Carbon tetrachloride	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2-Dichloroethane (EDC)	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Trichloroethene (TCE)	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2-Dichloropropane	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Bromodichloromethane	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Dibromomethane	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
cis-1,3-Dichloropropene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
trans-1,3-Dichloropropylene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1,2-Trichloroethane	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,3-Dichloropropane	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Tetrachloroethene (PCE)	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Dibromochloromethane	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2-Dibromoethane (EDB)	ND	0.00426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Chlorobenzene	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1,1,2-Tetrachloroethane	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Bromoform	ND	0.0426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,1,2,2-Tetrachloroethane	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Bromobenzene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
2-Chlorotoluene	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
4-Chlorotoluene	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2,3-Trichloropropane	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2,4-Trichlorobenzene	ND	0.0213		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,3-Dichlorobenzene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,4-Dichlorobenzene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2-Dichlorobenzene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 9:05:00 AM
Project: F200
Lab ID: 2005098-005
Matrix: Soil
Client Sample ID: 358-B7-20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Hexachloro-1,3-butadiene	ND	0.0426		mg/Kg-dry	1	5/12/2020 8:04:38 PM
1,2,3-Trichlorobenzene	ND	0.0170		mg/Kg-dry	1	5/12/2020 8:04:38 PM
Surr: Dibromofluoromethane	101	80 - 116		%Rec	1	5/12/2020 8:04:38 PM
Surr: Toluene-d8	99.9	84.8 - 113		%Rec	1	5/12/2020 8:04:38 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	82.8 - 113		%Rec	1	5/12/2020 8:04:38 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	17.0	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 10:35:00 AM
Project: F200
Lab ID: 2005098-008
Matrix: Soil
Client Sample ID: 358-B8-5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Chloromethane	ND	0.0661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Vinyl chloride	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Bromomethane	ND	0.0661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Trichlorofluoromethane (CFC-11)	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Chloroethane	ND	0.0661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1-Dichloroethene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Methylene chloride	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
trans-1,2-Dichloroethene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1-Dichloroethane	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
cis-1,2-Dichloroethene	0.205	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Chloroform	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1,1-Trichloroethane (TCA)	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1-Dichloropropene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Carbon tetrachloride	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2-Dichloroethane (EDC)	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Trichloroethene (TCE)	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2-Dichloropropane	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Bromodichloromethane	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Dibromomethane	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
cis-1,3-Dichloropropene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
trans-1,3-Dichloropropylene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1,2-Trichloroethane	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,3-Dichloropropane	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Tetrachloroethene (PCE)	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Dibromochloromethane	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2-Dibromoethane (EDB)	ND	0.00661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Chlorobenzene	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1,1,2-Tetrachloroethane	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Bromoform	ND	0.0661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,1,2,2-Tetrachloroethane	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Bromobenzene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
2-Chlorotoluene	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
4-Chlorotoluene	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2,3-Trichloropropane	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2,4-Trichlorobenzene	ND	0.0331		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,3-Dichlorobenzene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,4-Dichlorobenzene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2-Dichlorobenzene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 10:35:00 AM
Project: F200
Lab ID: 2005098-008
Matrix: Soil
Client Sample ID: 358-B8-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Hexachloro-1,3-butadiene	ND	0.0661		mg/Kg-dry	1	5/12/2020 8:34:45 PM
1,2,3-Trichlorobenzene	ND	0.0265		mg/Kg-dry	1	5/12/2020 8:34:45 PM
Surr: Dibromofluoromethane	97.2	80 - 116		%Rec	1	5/12/2020 8:34:45 PM
Surr: Toluene-d8	98.7	84.8 - 113		%Rec	1	5/12/2020 8:34:45 PM
Surr: 1-Bromo-4-fluorobenzene	96.0	82.8 - 113		%Rec	1	5/12/2020 8:34:45 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	17.8	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 10:50:00 AM
Project: F200
Lab ID: 2005098-011
Matrix: Soil
Client Sample ID: 358-B8-12.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Chloromethane	ND	0.0498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Vinyl chloride	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Bromomethane	ND	0.0498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Trichlorofluoromethane (CFC-11)	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Chloroethane	ND	0.0498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1-Dichloroethene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Methylene chloride	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
trans-1,2-Dichloroethene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1-Dichloroethane	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
cis-1,2-Dichloroethene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Chloroform	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1,1-Trichloroethane (TCA)	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1-Dichloropropene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Carbon tetrachloride	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2-Dichloroethane (EDC)	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Trichloroethene (TCE)	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2-Dichloropropane	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Bromodichloromethane	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Dibromomethane	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
cis-1,3-Dichloropropene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
trans-1,3-Dichloropropylene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1,2-Trichloroethane	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,3-Dichloropropane	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Tetrachloroethene (PCE)	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Dibromochloromethane	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2-Dibromoethane (EDB)	ND	0.00498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Chlorobenzene	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1,1,2-Tetrachloroethane	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Bromoform	ND	0.0498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,1,2,2-Tetrachloroethane	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Bromobenzene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
2-Chlorotoluene	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
4-Chlorotoluene	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2,3-Trichloropropane	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2,4-Trichlorobenzene	ND	0.0249		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,3-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,4-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 10:50:00 AM
Project: F200
Lab ID: 2005098-011
Matrix: Soil
Client Sample ID: 358-B8-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Hexachloro-1,3-butadiene	ND	0.0498		mg/Kg-dry	1	5/12/2020 9:04:53 PM
1,2,3-Trichlorobenzene	ND	0.0199		mg/Kg-dry	1	5/12/2020 9:04:53 PM
Surr: Dibromofluoromethane	96.0	80 - 116		%Rec	1	5/12/2020 9:04:53 PM
Surr: Toluene-d8	98.0	84.8 - 113		%Rec	1	5/12/2020 9:04:53 PM
Surr: 1-Bromo-4-fluorobenzene	95.2	82.8 - 113		%Rec	1	5/12/2020 9:04:53 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	11.2	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 11:05:00 AM
Project: F200
Lab ID: 2005098-013
Matrix: Soil
Client Sample ID: 358-B8-20

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Chloromethane	ND	0.0611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Vinyl chloride	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Bromomethane	ND	0.0611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Trichlorofluoromethane (CFC-11)	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Chloroethane	ND	0.0611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1-Dichloroethene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Methylene chloride	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
trans-1,2-Dichloroethene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1-Dichloroethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
cis-1,2-Dichloroethene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Chloroform	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1,1-Trichloroethane (TCA)	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1-Dichloropropene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Carbon tetrachloride	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2-Dichloroethane (EDC)	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Trichloroethene (TCE)	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2-Dichloropropane	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Bromodichloromethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Dibromomethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
cis-1,3-Dichloropropene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
trans-1,3-Dichloropropylene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1,2-Trichloroethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,3-Dichloropropane	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Tetrachloroethene (PCE)	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Dibromochloromethane	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2-Dibromoethane (EDB)	ND	0.00611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Chlorobenzene	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1,1,2-Tetrachloroethane	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Bromoform	ND	0.0611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,1,2,2-Tetrachloroethane	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Bromobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
2-Chlorotoluene	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
4-Chlorotoluene	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2,3-Trichloropropane	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2,4-Trichlorobenzene	ND	0.0305		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,3-Dichlorobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,4-Dichlorobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2-Dichlorobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 11:05:00 AM
Project: F200
Lab ID: 2005098-013
Matrix: Soil
Client Sample ID: 358-B8-20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Hexachloro-1,3-butadiene	ND	0.0611		mg/Kg-dry	1	5/12/2020 9:34:59 PM
1,2,3-Trichlorobenzene	ND	0.0244		mg/Kg-dry	1	5/12/2020 9:34:59 PM
Surr: Dibromofluoromethane	96.2	80 - 116		%Rec	1	5/12/2020 9:34:59 PM
Surr: Toluene-d8	99.4	84.8 - 113		%Rec	1	5/12/2020 9:34:59 PM
Surr: 1-Bromo-4-fluorobenzene	97.1	82.8 - 113		%Rec	1	5/12/2020 9:34:59 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	11.9	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 1:30:00 PM
Project: F200
Lab ID: 2005098-016
Matrix: Soil
Client Sample ID: **358-B9-7.5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Chloromethane	ND	0.0247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Vinyl chloride	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Bromomethane	ND	0.0247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Trichlorofluoromethane (CFC-11)	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Chloroethane	ND	0.0247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1-Dichloroethene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Methylene chloride	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
trans-1,2-Dichloroethene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1-Dichloroethane	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
cis-1,2-Dichloroethene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Chloroform	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1,1-Trichloroethane (TCA)	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1-Dichloropropene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Carbon tetrachloride	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2-Dichloroethane (EDC)	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Trichloroethene (TCE)	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2-Dichloropropane	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Bromodichloromethane	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Dibromomethane	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
cis-1,3-Dichloropropene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
trans-1,3-Dichloropropylene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1,2-Trichloroethane	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,3-Dichloropropane	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Tetrachloroethene (PCE)	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Dibromochloromethane	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2-Dibromoethane (EDB)	ND	0.00247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Chlorobenzene	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1,1,2-Tetrachloroethane	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Bromoform	ND	0.0247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,1,2,2-Tetrachloroethane	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Bromobenzene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
2-Chlorotoluene	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
4-Chlorotoluene	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2,3-Trichloropropane	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2,4-Trichlorobenzene	ND	0.0124		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,3-Dichlorobenzene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,4-Dichlorobenzene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2-Dichlorobenzene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 1:30:00 PM
Project: F200
Lab ID: 2005098-016
Matrix: Soil
Client Sample ID: 358-B9-7.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Hexachloro-1,3-butadiene	ND	0.0247		mg/Kg-dry	1	5/12/2020 10:05:09 PM
1,2,3-Trichlorobenzene	ND	0.00989		mg/Kg-dry	1	5/12/2020 10:05:09 PM
Surr: Dibromofluoromethane	96.3	80 - 116		%Rec	1	5/12/2020 10:05:09 PM
Surr: Toluene-d8	97.9	84.8 - 113		%Rec	1	5/12/2020 10:05:09 PM
Surr: 1-Bromo-4-fluorobenzene	95.6	82.8 - 113		%Rec	1	5/12/2020 10:05:09 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	11.8	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 1:40:00 PM
Project: F200
Lab ID: 2005098-018
Matrix: Soil
Client Sample ID: **358-B9-12.5**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Chloromethane	ND	0.0438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Vinyl chloride	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Bromomethane	ND	0.0438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Trichlorofluoromethane (CFC-11)	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Chloroethane	ND	0.0438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1-Dichloroethene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Methylene chloride	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
trans-1,2-Dichloroethene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1-Dichloroethane	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
cis-1,2-Dichloroethene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Chloroform	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1,1-Trichloroethane (TCA)	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1-Dichloropropene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Carbon tetrachloride	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2-Dichloroethane (EDC)	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Trichloroethene (TCE)	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2-Dichloropropane	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Bromodichloromethane	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Dibromomethane	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
cis-1,3-Dichloropropene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
trans-1,3-Dichloropropylene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1,2-Trichloroethane	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,3-Dichloropropane	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Tetrachloroethene (PCE)	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Dibromochloromethane	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2-Dibromoethane (EDB)	ND	0.00438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Chlorobenzene	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1,1,2-Tetrachloroethane	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Bromoform	ND	0.0438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,1,2,2-Tetrachloroethane	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Bromobenzene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
2-Chlorotoluene	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
4-Chlorotoluene	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2,3-Trichloropropane	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2,4-Trichlorobenzene	ND	0.0219		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,3-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,4-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2-Dichlorobenzene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 1:40:00 PM
Project: F200
Lab ID: 2005098-018
Matrix: Soil
Client Sample ID: 358-B9-12.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Hexachloro-1,3-butadiene	ND	0.0438		mg/Kg-dry	1	5/12/2020 10:35:16 PM
1,2,3-Trichlorobenzene	ND	0.0175		mg/Kg-dry	1	5/12/2020 10:35:16 PM
Surr: Dibromofluoromethane	95.6	80 - 116		%Rec	1	5/12/2020 10:35:16 PM
Surr: Toluene-d8	98.5	84.8 - 113		%Rec	1	5/12/2020 10:35:16 PM
Surr: 1-Bromo-4-fluorobenzene	95.4	82.8 - 113		%Rec	1	5/12/2020 10:35:16 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	9.27	0.500		wt%	1	5/14/2020 9:58:14 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 1:50:00 PM
Project: F200
Lab ID: 2005098-020
Matrix: Soil
Client Sample ID: **358-B9-20**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28305 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Chloromethane	ND	0.0553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Vinyl chloride	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Bromomethane	ND	0.0553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Trichlorofluoromethane (CFC-11)	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Chloroethane	ND	0.0553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1-Dichloroethene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Methylene chloride	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
trans-1,2-Dichloroethene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1-Dichloroethane	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
cis-1,2-Dichloroethene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Chloroform	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1,1-Trichloroethane (TCA)	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1-Dichloropropene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Carbon tetrachloride	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2-Dichloroethane (EDC)	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Trichloroethene (TCE)	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2-Dichloropropane	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Bromodichloromethane	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Dibromomethane	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
cis-1,3-Dichloropropene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
trans-1,3-Dichloropropylene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1,2-Trichloroethane	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,3-Dichloropropane	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Tetrachloroethene (PCE)	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Dibromochloromethane	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2-Dibromoethane (EDB)	ND	0.00553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Chlorobenzene	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1,1,2-Tetrachloroethane	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Bromoform	ND	0.0553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,1,2,2-Tetrachloroethane	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Bromobenzene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
2-Chlorotoluene	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
4-Chlorotoluene	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2,3-Trichloropropane	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2,4-Trichlorobenzene	ND	0.0276		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,3-Dichlorobenzene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,4-Dichlorobenzene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2-Dichlorobenzene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM

Analytical Report

Work Order: **2005098**
Date Reported: **5/15/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 1:50:00 PM
Project: F200
Lab ID: 2005098-020
Matrix: Soil
Client Sample ID: 358-B9-20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28305		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	0.553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Hexachloro-1,3-butadiene	ND	0.0553		mg/Kg-dry	1	5/12/2020 11:05:25 PM
1,2,3-Trichlorobenzene	ND	0.0221		mg/Kg-dry	1	5/12/2020 11:05:25 PM
Surr: Dibromofluoromethane	95.5	80 - 116		%Rec	1	5/12/2020 11:05:25 PM
Surr: Toluene-d8	99.5	84.8 - 113		%Rec	1	5/12/2020 11:05:25 PM
Surr: 1-Bromo-4-fluorobenzene	96.2	82.8 - 113		%Rec	1	5/12/2020 11:05:25 PM
Sample Moisture (Percent Moisture)				Batch ID: R59175		Analyst: EH
Percent Moisture	8.59	0.500		wt%	1	5/14/2020 9:58:14 AM

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28305** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **LCSS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182320**

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	21.6	169				
Chloromethane	0.985	0.0500	1.000	0	98.5	45.3	153				
Vinyl chloride	0.970	0.0250	1.000	0	97.0	57.5	137				
Bromomethane	1.28	0.0500	1.000	0	128	32.8	194				
Trichlorofluoromethane (CFC-11)	1.06	0.0200	1.000	0	106	54.3	152				
Chloroethane	0.925	0.0500	1.000	0	92.5	52	146				
1,1-Dichloroethene	1.04	0.0200	1.000	0	104	62.8	139				
Methylene chloride	1.00	0.0200	1.000	0	100	78.4	118				
trans-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	82	117				
1,1-Dichloroethane	0.973	0.0200	1.000	0	97.3	78	119				
cis-1,2-Dichloroethene	0.993	0.0200	1.000	0	99.3	81.9	116				
Chloroform	1.00	0.0200	1.000	0	100	80.8	117				
1,1,1-Trichloroethane (TCA)	1.00	0.0250	1.000	0	100	81.4	117				
1,1-Dichloropropene	0.997	0.0200	1.000	0	99.7	79.9	117				
Carbon tetrachloride	1.02	0.0500	1.000	0	102	80.4	117				
1,2-Dichloroethane (EDC)	0.988	0.0200	1.000	0	98.8	77.5	117				
Trichloroethene (TCE)	1.00	0.0200	1.000	0	100	83.4	115				
1,2-Dichloropropane	0.937	0.0200	1.000	0	93.7	77.6	117				
Bromodichloromethane	0.967	0.0200	1.000	0	96.7	78.9	116				
Dibromomethane	0.951	0.0200	1.000	0	95.1	81.2	115				
cis-1,3-Dichloropropene	0.939	0.0200	1.000	0	93.9	78	115				
trans-1,3-Dichloropropylene	0.916	0.0200	1.000	0	91.6	75.7	117				
1,1,2-Trichloroethane	0.935	0.0200	1.000	0	93.5	77.9	118				
1,3-Dichloropropane	0.933	0.0250	1.000	0	93.3	77.1	118				
Tetrachloroethene (PCE)	0.982	0.0250	1.000	0	98.2	84.3	117				
Dibromochloromethane	0.921	0.0250	1.000	0	92.1	77.9	118				
1,2-Dibromoethane (EDB)	0.933	0.00500	1.000	0	93.3	78.6	117				
Chlorobenzene	0.997	0.0250	1.000	0	99.7	86.5	113				
1,1,1,2-Tetrachloroethane	0.991	0.0250	1.000	0	99.1	84.8	113				
Bromoform	0.914	0.0500	1.000	0	91.4	70.7	125				
1,1,2,2-Tetrachloroethane	0.883	0.0200	1.000	0	88.3	68.3	125				

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28305** SampType: **LCS** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **LCSS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182320**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	0.977	0.0200	1.000	0	97.7	84	117				
2-Chlorotoluene	1.01	0.0250	1.000	0	101	80.4	122				
4-Chlorotoluene	1.00	0.0250	1.000	0	100	83.1	118				
1,2,3-Trichloropropane	0.907	0.0250	1.000	0	90.7	71	125				
1,2,4-Trichlorobenzene	1.00	0.0250	1.000	0	100	81	126				
1,3-Dichlorobenzene	1.03	0.0200	1.000	0	103	90.4	115				
1,4-Dichlorobenzene	1.02	0.0200	1.000	0	102	90.3	115				
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	90.3	115				
1,2-Dibromo-3-chloropropane	0.955	0.500	1.000	0	95.5	62.3	136				
Hexachloro-1,3-butadiene	1.01	0.0500	1.000	0	101	77.8	133				
1,2,3-Trichlorobenzene	0.971	0.0200	1.000	0	97.1	75.9	130				
Surr: Dibromofluoromethane	1.32		1.250		105	80	116				
Surr: Toluene-d8	1.22		1.250		97.5	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.27		1.250		102	82.8	113				

Sample ID: **MB-28305** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **MBLKS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182321**

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									
Bromomethane	ND	0.0500									
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									

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28305** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **MBLKS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
Bromobenzene	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									

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28305** SampType: **MBLK** Units: **mg/Kg** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **MBLKS** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.16		1.250		92.5	80	116				
Surr: Toluene-d8	1.22		1.250		97.8	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.250		95.8	82.8	113				

Sample ID: **2005085-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0275						0		30	
Chloromethane	ND	0.0688						0		30	
Vinyl chloride	ND	0.0344						0		30	
Bromomethane	ND	0.0688						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0275						0		30	
Chloroethane	ND	0.0688						0		30	
1,1-Dichloroethene	ND	0.0275						0		30	
Methylene chloride	ND	0.0275						0		30	
trans-1,2-Dichloroethene	ND	0.0275						0		30	
1,1-Dichloroethane	ND	0.0275						0		30	
cis-1,2-Dichloroethene	ND	0.0275						0		30	
Chloroform	ND	0.0275						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0344						0		30	
1,1-Dichloropropene	ND	0.0275						0		30	
Carbon tetrachloride	ND	0.0688						0		30	
1,2-Dichloroethane (EDC)	ND	0.0275						0		30	
Trichloroethene (TCE)	ND	0.0275						0		30	
1,2-Dichloropropane	ND	0.0275						0		30	
Bromodichloromethane	ND	0.0275						0		30	
Dibromomethane	ND	0.0275						0		30	
cis-1,3-Dichloropropene	ND	0.0275						0		30	
trans-1,3-Dichloropropylene	ND	0.0275						0		30	

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	0.0275						0		30	
1,3-Dichloropropane	ND	0.0344						0		30	
Tetrachloroethene (PCE)	ND	0.0344						0		30	
Dibromochloromethane	ND	0.0344						0		30	
1,2-Dibromoethane (EDB)	ND	0.00688						0		30	
Chlorobenzene	ND	0.0344						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0344						0		30	
Bromoform	ND	0.0688						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0275						0		30	
Bromobenzene	ND	0.0275						0		30	
2-Chlorotoluene	ND	0.0344						0		30	
4-Chlorotoluene	ND	0.0344						0		30	
1,2,3-Trichloropropane	ND	0.0344						0		30	
1,2,4-Trichlorobenzene	ND	0.0344						0		30	
1,3-Dichlorobenzene	ND	0.0275						0		30	
1,4-Dichlorobenzene	ND	0.0275						0		30	
1,2-Dichlorobenzene	ND	0.0275						0		30	
1,2-Dibromo-3-chloropropane	ND	0.688						0		30	
Hexachloro-1,3-butadiene	ND	0.0688						0		30	
1,2,3-Trichlorobenzene	ND	0.0275						0		30	
Surr: Dibromofluoromethane	1.70		1.720		99.1	80	116		0		
Surr: Toluene-d8	1.73		1.720		101	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.68		1.720		97.7	82.8	113		0		

Sample ID: **2005085-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.21	0.0235	1.177	0	103	-0.64	180				
Chloromethane	1.25	0.0588	1.177	0	107	33.2	162				

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	1.28	0.0294	1.177	0	109	47.2	146				
Bromomethane	1.99	0.0588	1.177	0	169	18.7	226				
Trichlorofluoromethane (CFC-11)	1.35	0.0235	1.177	0	114	48.9	158				
Chloroethane	1.44	0.0588	1.177	0	123	20.8	195				
1,1-Dichloroethene	1.33	0.0235	1.177	0	113	67.1	135				
Methylene chloride	1.26	0.0235	1.177	0	107	64.9	137				
trans-1,2-Dichloroethene	1.32	0.0235	1.177	0	113	75.1	126				
1,1-Dichloroethane	1.29	0.0235	1.177	0	110	68.4	132				
cis-1,2-Dichloroethene	1.28	0.0235	1.177	0	109	76.2	125				
Chloroform	1.29	0.0235	1.177	0	110	74.5	127				
1,1,1-Trichloroethane (TCA)	1.33	0.0294	1.177	0	113	74.5	126				
1,1-Dichloropropene	1.33	0.0235	1.177	0	113	70.7	128				
Carbon tetrachloride	1.33	0.0588	1.177	0	113	72.5	126				
1,2-Dichloroethane (EDC)	1.30	0.0235	1.177	0	110	70.4	128				
Trichloroethene (TCE)	1.29	0.0235	1.177	0	109	64.7	145				
1,2-Dichloropropane	1.26	0.0235	1.177	0	107	69.3	129				
Bromodichloromethane	1.26	0.0235	1.177	0	107	75.9	120				
Dibromomethane	1.25	0.0235	1.177	0	106	78.5	123				
cis-1,3-Dichloropropene	1.23	0.0235	1.177	0	104	67.3	122				
trans-1,3-Dichloropropylene	1.18	0.0235	1.177	0	100	64.4	124				
1,1,2-Trichloroethane	1.24	0.0235	1.177	0	106	72.4	129				
1,3-Dichloropropane	1.26	0.0294	1.177	0	107	70.5	128				
Tetrachloroethene (PCE)	1.28	0.0294	1.177	0	109	64.9	140				
Dibromochloromethane	1.20	0.0294	1.177	0	102	71.8	125				
1,2-Dibromoethane (EDB)	1.25	0.00588	1.177	0	106	73.8	126				
Chlorobenzene	1.26	0.0294	1.177	0	107	85.1	118				
1,1,1,2-Tetrachloroethane	1.26	0.0294	1.177	0	107	82.2	118				
Bromoform	1.18	0.0588	1.177	0	100	66.1	130				
1,1,2,2-Tetrachloroethane	1.25	0.0235	1.177	0	106	41.2	150				
Bromobenzene	1.23	0.0235	1.177	0	105	84.6	121				
2-Chlorotoluene	1.24	0.0294	1.177	0	105	78.4	128				

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	1.24	0.0294	1.177	0	106	81.2	123				
1,2,3-Trichloropropane	1.42	0.0294	1.177	0	121	66.4	132				
1,2,4-Trichlorobenzene	1.26	0.0294	1.177	0	107	68.9	139				
1,3-Dichlorobenzene	1.27	0.0235	1.177	0	108	87.8	120				
1,4-Dichlorobenzene	1.26	0.0235	1.177	0	107	88.1	119				
1,2-Dichlorobenzene	1.27	0.0235	1.177	0	108	88.1	120				
1,2-Dibromo-3-chloropropane	1.21	0.588	1.177	0	103	56.6	144				
Hexachloro-1,3-butadiene	1.38	0.0588	1.177	0	117	64.8	148				
1,2,3-Trichlorobenzene	1.29	0.0235	1.177	0	110	59.3	150				
Surr: Dibromofluoromethane	1.58		1.471		107	80	116				
Surr: Toluene-d8	1.49		1.471		101	84.8	113				
Surr: 1-Bromo-4-fluorobenzene	1.47		1.471		100	82.8	113				

Sample ID: **2005085-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.20	0.0235	1.177	0	102	-0.64	180	1.211	0.979	30	
Chloromethane	1.29	0.0588	1.177	0	109	33.2	162	1.254	2.57	30	
Vinyl chloride	1.27	0.0294	1.177	0	108	47.2	146	1.278	0.929	30	
Bromomethane	1.83	0.0588	1.177	0	155	18.7	226	1.994	8.76	30	
Trichlorofluoromethane (CFC-11)	1.34	0.0235	1.177	0	114	48.9	158	1.346	0.454	30	
Chloroethane	1.41	0.0588	1.177	0	120	20.8	195	1.442	2.39	30	
1,1-Dichloroethene	1.28	0.0235	1.177	0	109	67.1	135	1.326	3.46	30	
Methylene chloride	1.21	0.0235	1.177	0	103	64.9	137	1.256	3.38	30	
trans-1,2-Dichloroethene	1.28	0.0235	1.177	0	109	75.1	126	1.325	3.29	30	
1,1-Dichloroethane	1.25	0.0235	1.177	0	106	68.4	132	1.290	2.94	30	
cis-1,2-Dichloroethene	1.25	0.0235	1.177	0	106	76.2	125	1.278	2.27	30	
Chloroform	1.26	0.0235	1.177	0	107	74.5	127	1.291	2.15	30	
1,1,1-Trichloroethane (TCA)	1.30	0.0294	1.177	0	110	74.5	126	1.334	2.60	30	

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloropropene	1.33	0.0235	1.177	0	113	70.7	128	1.327	0.250	30	
Carbon tetrachloride	1.31	0.0588	1.177	0	111	72.5	126	1.329	1.25	30	
1,2-Dichloroethane (EDC)	1.25	0.0235	1.177	0	106	70.4	128	1.297	3.83	30	
Trichloroethene (TCE)	1.26	0.0235	1.177	0	107	64.7	145	1.287	2.16	30	
1,2-Dichloropropane	1.23	0.0235	1.177	0	105	69.3	129	1.262	2.41	30	
Bromodichloromethane	1.22	0.0235	1.177	0	104	75.9	120	1.263	3.15	30	
Dibromomethane	1.21	0.0235	1.177	0	103	78.5	123	1.252	3.05	30	
cis-1,3-Dichloropropene	1.19	0.0235	1.177	0	101	67.3	122	1.226	3.16	30	
trans-1,3-Dichloropropylene	1.16	0.0235	1.177	0	98.9	64.4	124	1.182	1.54	30	
1,1,2-Trichloroethane	1.22	0.0235	1.177	0	103	72.4	129	1.242	2.07	30	
1,3-Dichloropropane	1.22	0.0294	1.177	0	103	70.5	128	1.257	3.41	30	
Tetrachloroethene (PCE)	1.26	0.0294	1.177	0	107	64.9	140	1.280	1.69	30	
Dibromochloromethane	1.18	0.0294	1.177	0	100	71.8	125	1.197	1.28	30	
1,2-Dibromoethane (EDB)	1.20	0.00588	1.177	0	102	73.8	126	1.253	4.34	30	
Chlorobenzene	1.25	0.0294	1.177	0	107	85.1	118	1.262	0.589	30	
1,1,1,2-Tetrachloroethane	1.23	0.0294	1.177	0	105	82.2	118	1.263	2.40	30	
Bromoform	1.14	0.0588	1.177	0	96.9	66.1	130	1.178	3.23	30	
1,1,2,2-Tetrachloroethane	1.26	0.0235	1.177	0	107	41.2	150	1.253	0.312	30	
Bromobenzene	1.23	0.0235	1.177	0	104	84.6	121	1.231	0.137	30	
2-Chlorotoluene	1.23	0.0294	1.177	0	104	78.4	128	1.241	0.969	30	
4-Chlorotoluene	1.24	0.0294	1.177	0	105	81.2	123	1.243	0.382	30	
1,2,3-Trichloropropane	1.42	0.0294	1.177	0	121	66.4	132	1.419	0.0349	30	
1,2,4-Trichlorobenzene	1.27	0.0294	1.177	0	108	68.9	139	1.261	0.295	30	
1,3-Dichlorobenzene	1.27	0.0235	1.177	0	108	87.8	120	1.270	0.290	30	
1,4-Dichlorobenzene	1.26	0.0235	1.177	0	107	88.1	119	1.258	0.561	30	
1,2-Dichlorobenzene	1.27	0.0235	1.177	0	108	88.1	120	1.270	0.128	30	
1,2-Dibromo-3-chloropropane	1.25	0.588	1.177	0	106	56.6	144	1.208	3.58	30	
Hexachloro-1,3-butadiene	1.38	0.0588	1.177	0	117	64.8	148	1.377	0.298	30	
1,2,3-Trichlorobenzene	1.29	0.0235	1.177	0	110	59.3	150	1.293	0.0884	30	
Surr: Dibromofluoromethane	1.56		1.471		106	80	116		0		
Surr: Toluene-d8	1.46		1.471		99.3	84.8	113		0		

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **BATCH** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182300**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	1.47		1.471		100	82.8	113		0		

Sample ID: **2005098-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B7-5** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182308**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0185						0		30	
Chloromethane	ND	0.0463						0		30	
Vinyl chloride	ND	0.0231						0		30	
Bromomethane	ND	0.0463						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0185						0		30	
Chloroethane	ND	0.0463						0		30	
1,1-Dichloroethene	ND	0.0185						0		30	
Methylene chloride	ND	0.0185						0		30	
trans-1,2-Dichloroethene	ND	0.0185						0		30	
1,1-Dichloroethane	ND	0.0185						0		30	
cis-1,2-Dichloroethene	0.0529	0.0185						0.05089	3.80	30	
Chloroform	ND	0.0185						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0231						0		30	
1,1-Dichloropropene	ND	0.0185						0		30	
Carbon tetrachloride	ND	0.0463						0		30	
1,2-Dichloroethane (EDC)	ND	0.0185						0		30	
Trichloroethene (TCE)	ND	0.0185						0		30	
1,2-Dichloropropane	ND	0.0185						0		30	
Bromodichloromethane	ND	0.0185						0		30	
Dibromomethane	ND	0.0185						0		30	
cis-1,3-Dichloropropene	ND	0.0185						0		30	
trans-1,3-Dichloropropylene	ND	0.0185						0		30	
1,1,2-Trichloroethane	ND	0.0185						0		30	
1,3-Dichloropropane	ND	0.0231						0		30	

Work Order: 2005098
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005098-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **5/12/2020** RunNo: **59171**
Client ID: **358-B7-5** Batch ID: **28305** Analysis Date: **5/12/2020** SeqNo: **1182308**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene (PCE)	0.0437	0.0231						0.04384	0.310	30	
Dibromochloromethane	ND	0.0231						0		30	
1,2-Dibromoethane (EDB)	ND	0.00463						0		30	
Chlorobenzene	ND	0.0231						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0231						0		30	
Bromoform	ND	0.0463						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0185						0		30	
Bromobenzene	ND	0.0185						0		30	
2-Chlorotoluene	ND	0.0231						0		30	
4-Chlorotoluene	ND	0.0231						0		30	
1,2,3-Trichloropropane	ND	0.0231						0		30	
1,2,4-Trichlorobenzene	ND	0.0231						0		30	
1,3-Dichlorobenzene	ND	0.0185						0		30	
1,4-Dichlorobenzene	ND	0.0185						0		30	
1,2-Dichlorobenzene	ND	0.0185						0		30	
1,2-Dibromo-3-chloropropane	ND	0.463						0		30	
Hexachloro-1,3-butadiene	ND	0.0463						0		30	
1,2,3-Trichlorobenzene	ND	0.0185						0		30	
Surr: Dibromofluoromethane	1.11		1.157		95.7	80	116		0		
Surr: Toluene-d8	1.14		1.157		98.4	84.8	113		0		
Surr: 1-Bromo-4-fluorobenzene	1.12		1.157		96.5	82.8	113		0		

Sample Log-In Check List

Client Name:	**ONEILL**	Work Order Number:	**2005098**
Logged by:	**Clare Griggs**	Date Received:	**5/11/2020 4:45:00 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 >2°C to 6°C *	Yes	☐	No ☑	NA	☐
	Samples were collected the same day and chilled.					
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	6.2
Sample	6.3

* 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: 5/11/20 Page: 1 of: 2

Laboratory Project No (internal): 2005098

Project Name: "F200

Special Remarks:

Client: OSG

Project No: 2021

Address:

Collected by: ATKINS

City, State, Zip:

Location: F1358

Telephone:

Report To (PM): ATKINS

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

Fax:

PM Email:

	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)	Comments
1	358-B7-~~5~~ 5	5/11/20	825	S	X														
2	-7.5		830																
3	-10		845		X														
4	-15		855																
5	-20		905		X														
6	-25		910																
7	358-BB-2.5		1030																
8	-5		1035		X														
9	-7.5		1040																
10	-10		1045																

*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

Turn-around Time:

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

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 [signature]	5/11/20 - 1620	x [signature]	5/11/12 1645
Relinquished	Date/Time	Received	Date/Time
x		x	

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: 5/11/20 Page: 2 of: 2

Laboratory Project No (internal): 200520G8

Project Name: F200

Special Remarks:

Project No: 2021

Client: OSG

Collected by: ATKINS

Address:

Location: F358

City, State, Zip:

Report To (PM): ATKINS

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

Telephone:

PM Email:

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	HVOCs (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)	Comments
1	358-B8-12.5	5/11/20	1050	S	X														
2	-15		1100																
3	-20		1105		X														
4	-25		1115																
5	358-B9-2.5		1315																
6	-7.5		1330		X														
7	-10		1335																
8	-12.5		1340		X														
9	-15		1345																
10	-20		1350		X														
	-25		1400																

*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

Turn-around Time:

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

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 [signature]	5/11/20 -1620	x [signature]	5/11/20 1645
Relinquished	Date/Time	Received	Date/Time
x		x	

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

O'Neill Service Group
Vance Atkins
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: F200
Work Order Number: 2005099

May 19, 2020

Attention Vance Atkins:

Fremont Analytical, Inc. received 3 sample(s) on 5/11/2020 for the analyses presented in the following report.

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: *05/19/2020*

CLIENT: O'Neill Service Group
Project: F200
Work Order: 2005099

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2005099-001	358-B6-GW	05/11/2020 10:15 AM	05/11/2020 4:45 PM
2005099-002	358-B7-GW	05/11/2020 2:45 PM	05/11/2020 4:45 PM
2005099-003	Trip Blank	05/06/2020 12:00 AM	05/11/2020 4:45 PM

Case Narrative

WO#: **2005099**
Date: **5/19/2020**

CLIENT: O'Neill Service Group
Project: F200

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

Analytical Report

Work Order: **2005099**
Date Reported: **5/19/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 10:15:00 AM
Project: F200
Lab ID: 2005099-001
Matrix: Groundwater
Client Sample ID: **358-B6-GW**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28339 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Chloromethane	ND	2.00		µg/L	1	5/16/2020 1:47:05 AM
Vinyl chloride	ND	0.200		µg/L	1	5/16/2020 1:47:05 AM
Bromomethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Chloroethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Methylene chloride	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
cis-1,2-Dichloroethene	17.8	1.00		µg/L	1	5/16/2020 1:47:05 AM
Chloroform	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Carbon tetrachloride	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Trichloroethene (TCE)	6.24	0.500		µg/L	1	5/16/2020 1:47:05 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Bromodichloromethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Dibromomethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Tetrachloroethene (PCE)	6.08	1.00		µg/L	1	5/16/2020 1:47:05 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/16/2020 1:47:05 AM
Chlorobenzene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Bromoform	ND	2.00		µg/L	1	5/16/2020 1:47:05 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Bromobenzene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
2-Chlorotoluene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
4-Chlorotoluene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/16/2020 1:47:05 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM

Analytical Report

Work Order: **2005099**
Date Reported: **5/19/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 10:15:00 AM
Project: F200
Lab ID: 2005099-001
Matrix: Groundwater
Client Sample ID: **358-B6-GW**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28339		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/16/2020 1:47:05 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/16/2020 1:47:05 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/16/2020 1:47:05 AM
Surr: Dibromofluoromethane	99.0	81.1 - 118		%Rec	1	5/16/2020 1:47:05 AM
Surr: Toluene-d8	98.8	85.7 - 113		%Rec	1	5/16/2020 1:47:05 AM
Surr: 1-Bromo-4-fluorobenzene	98.5	84.2 - 111		%Rec	1	5/16/2020 1:47:05 AM

Client: O'Neill Service Group
Collection Date: 5/11/2020 2:45:00 PM
Project: F200
Lab ID: 2005099-002
Matrix: Groundwater
Client Sample ID: **358-B7-GW**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28339 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Chloromethane	ND	2.00		µg/L	1	5/16/2020 2:17:21 AM
Vinyl chloride	18.8	0.200		µg/L	1	5/16/2020 2:17:21 AM
Bromomethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Chloroethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Methylene chloride	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
cis-1,2-Dichloroethene	33.6	1.00		µg/L	1	5/16/2020 2:17:21 AM
Chloroform	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Carbon tetrachloride	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Trichloroethene (TCE)	2.99	0.500		µg/L	1	5/16/2020 2:17:21 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Bromodichloromethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Dibromomethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	5/16/2020 2:17:21 AM
Chlorobenzene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Bromoform	ND	2.00		µg/L	1	5/16/2020 2:17:21 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Bromobenzene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
2-Chlorotoluene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
4-Chlorotoluene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/16/2020 2:17:21 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM

Analytical Report

Work Order: **2005099**
Date Reported: **5/19/2020**

Client: O'Neill Service Group
Collection Date: 5/11/2020 2:45:00 PM
Project: F200
Lab ID: 2005099-002
Matrix: Groundwater
Client Sample ID: **358-B7-GW**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28339		Analyst: KT
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/16/2020 2:17:21 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/16/2020 2:17:21 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/16/2020 2:17:21 AM
Surr: Dibromofluoromethane	96.6	81.1 - 118		%Rec	1	5/16/2020 2:17:21 AM
Surr: Toluene-d8	99.3	85.7 - 113		%Rec	1	5/16/2020 2:17:21 AM
Surr: 1-Bromo-4-fluorobenzene	98.8	84.2 - 111		%Rec	1	5/16/2020 2:17:21 AM

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28339** SampType: **LCS** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **LCSW** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183340**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	14.7	1.00	20.00	0	73.5	14.5	175				
Chloromethane	16.8	2.00	20.00	0	84.1	44.8	153				
Vinyl chloride	18.2	0.200	20.00	0	90.9	64.1	131				
Bromomethane	20.1	1.00	20.00	0	100	34.2	171				
Trichlorofluoromethane (CFC-11)	19.3	1.00	20.00	0	96.4	77.4	121				
Chloroethane	19.3	1.00	20.00	0	96.5	73.3	123				
1,1-Dichloroethene	19.5	1.00	20.00	0	97.4	81.8	116				
Methylene chloride	20.2	1.00	20.00	0	101	80.4	116				
trans-1,2-Dichloroethene	19.9	1.00	20.00	0	99.7	83.1	115				
1,1-Dichloroethane	19.4	1.00	20.00	0	97.1	79.5	119				
cis-1,2-Dichloroethene	19.8	1.00	20.00	0	99.2	83.5	115				
Chloroform	20.1	1.00	20.00	0	101	81	117				
1,1,1-Trichloroethane (TCA)	19.7	1.00	20.00	0	98.5	82.8	116				
1,1-Dichloropropene	19.9	1.00	20.00	0	99.6	81.5	117				
Carbon tetrachloride	19.6	1.00	20.00	0	98.1	83.3	114				
1,2-Dichloroethane (EDC)	19.8	1.00	20.00	0	98.8	78.4	118				
Trichloroethene (TCE)	20.3	0.500	20.00	0	101	82.2	116				
1,2-Dichloropropane	20.5	1.00	20.00	0	103	78	120				
Bromodichloromethane	19.9	1.00	20.00	0	99.5	80.9	116				
Dibromomethane	20.2	1.00	20.00	0	101	80	117				
cis-1,3-Dichloropropene	20.6	1.00	20.00	0	103	79.8	118				
trans-1,3-Dichloropropylene	20.5	1.00	20.00	0	102	75.8	122				
1,1,2-Trichloroethane	20.7	1.00	20.00	0	103	77.8	120				
1,3-Dichloropropane	20.6	1.00	20.00	0	103	76.5	121				
Tetrachloroethene (PCE)	20.3	1.00	20.00	0	101	86.2	114				
Dibromochloromethane	21.0	1.00	20.00	0	105	78	117				
1,2-Dibromoethane (EDB)	20.6	0.250	20.00	0	103	76.8	120				
Chlorobenzene	19.8	1.00	20.00	0	99.1	85.2	112				
1,1,1,2-Tetrachloroethane	19.7	1.00	20.00	0	98.4	85.5	110				

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28339** SampType: **LCS** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **LCSW** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183340**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	19.7	2.00	20.00	0	98.6	73.4	119				
1,1,2,2-Tetrachloroethane	20.1	1.00	20.00	0	101	74.8	124				
Bromobenzene	19.7	1.00	20.00	0	98.3	83.2	116				
2-Chlorotoluene	20.0	1.00	20.00	0	100	81.8	119				
4-Chlorotoluene	19.6	1.00	20.00	0	98.0	81.6	118				
1,2,3-Trichloropropane	19.9	1.00	20.00	0	99.6	73.2	126				
1,2,4-Trichlorobenzene	19.6	2.00	20.00	0	98.1	68.7	138				
1,3-Dichlorobenzene	20.5	1.00	20.00	0	103	90.7	114				
1,4-Dichlorobenzene	20.6	1.00	20.00	0	103	90.1	114				
1,2-Dichlorobenzene	20.5	1.00	20.00	0	103	90.1	115				
1,2-Dibromo-3-chloropropane	19.2	1.00	20.00	0	95.9	54.8	147				
Hexachloro-1,3-butadiene	20.3	4.00	20.00	0	101	73.6	134				
1,2,3-Trichlorobenzene	20.3	4.00	20.00	0	102	57.1	150				
Surr: Dibromofluoromethane	26.0		25.00		104	81.1	118				
Surr: Toluene-d8	25.3		25.00		101	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.8		25.00		103	84.2	111				

Sample ID: **MB-28339** SampType: **MBLK** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **MBLKW** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183341**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28339** SampType: **MBLK** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **MBLKW** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183341**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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									
Dibromomethane	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									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Bromoform	ND	2.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
Bromobenzene	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: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28339** SampType: **MBLK** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **MBLKW** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183341**

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	24.6		25.00		98.3	81.1	118				
Surr: Toluene-d8	24.9		25.00		99.7	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	24.8		25.00		99.1	84.2	111				

Sample ID: **2005097-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183297**

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	
Bromomethane	ND	1.00						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: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005097-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183297**

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	
Dibromomethane	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	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
Bromobenzene	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	25.3		25.00		101	81.1	118		0		
Surr: Toluene-d8	25.0		25.00		100	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.5	84.2	111		0		

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005097-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2005107-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183309**

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	
Bromomethane	ND	1.00						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	
Dibromomethane	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	

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005107-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183309**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
Bromobenzene	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	24.8		25.00		99.4	81.1	118		0		
Surr: Toluene-d8	24.7		25.00		99.0	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.8		25.00		99.0	84.2	111		0		

Sample ID: **2005132-003AMS** SampType: **MS** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183326**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	13.9	1.00	20.00	0	69.5	6.11	189				
Chloromethane	16.2	2.00	20.00	0	81.0	23.9	203				
Vinyl chloride	19.0	0.200	20.00	0	95.0	53.4	152				

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005132-003AMS** SampType: **MS** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183326**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	20.3	1.00	20.00	0	101	29.7	169				
Trichlorofluoromethane (CFC-11)	20.5	1.00	20.00	0	103	76.7	132				
Chloroethane	20.3	1.00	20.00	0	101	62.5	149				
1,1-Dichloroethene	21.4	1.00	20.00	0	107	84.5	127				
Methylene chloride	20.9	1.00	20.00	0	105	79.9	125				
trans-1,2-Dichloroethene	21.4	1.00	20.00	0	107	86.2	125				
1,1-Dichloroethane	20.5	1.00	20.00	0	102	78.4	131				
cis-1,2-Dichloroethene	20.7	1.00	20.00	0	104	84.5	124				
Chloroform	27.7	1.00	20.00	6.333	107	75.2	131				
1,1,1-Trichloroethane (TCA)	21.0	1.00	20.00	0	105	80.4	131				
1,1-Dichloropropene	21.1	1.00	20.00	0	105	84.2	129				
Carbon tetrachloride	21.2	1.00	20.00	0	106	81.3	130				
1,2-Dichloroethane (EDC)	20.3	1.00	20.00	0	102	74.8	130				
Trichloroethene (TCE)	21.6	0.500	20.00	0	108	82.7	128				
1,2-Dichloropropane	21.0	1.00	20.00	0	105	78.2	130				
Bromodichloromethane	20.9	1.00	20.00	0	104	75.2	130				
Dibromomethane	21.0	1.00	20.00	0	105	74.7	129				
cis-1,3-Dichloropropene	20.5	1.00	20.00	0	103	66.8	129				
trans-1,3-Dichloropropylene	20.0	1.00	20.00	0	100	62.6	132				
1,1,2-Trichloroethane	21.7	1.00	20.00	0	109	70.9	135				
1,3-Dichloropropane	21.3	1.00	20.00	0	106	70.5	132				
Tetrachloroethene (PCE)	21.6	1.00	20.00	0	108	83.2	128				
Dibromochloromethane	21.8	1.00	20.00	0	109	72.9	130				
1,2-Dibromoethane (EDB)	21.2	0.250	20.00	0	106	69.3	132				
Chlorobenzene	20.8	1.00	20.00	0	104	87.8	120				
1,1,1,2-Tetrachloroethane	20.7	1.00	20.00	0	104	86.1	119				
Bromoform	20.6	2.00	20.00	0	103	72.7	127				
1,1,2,2-Tetrachloroethane	20.3	1.00	20.00	0	102	72.6	133				
Bromobenzene	20.5	1.00	20.00	0	103	81.4	126				

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005132-003AMS** SampType: **MS** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183326**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	20.9	1.00	20.00	0	104	70.2	143				
4-Chlorotoluene	20.5	1.00	20.00	0	102	73.5	136				
1,2,3-Trichloropropane	19.2	1.00	20.00	0	96.0	62.4	136				
1,2,4-Trichlorobenzene	18.2	2.00	20.00	0	91.2	52.7	158				
1,3-Dichlorobenzene	20.9	1.00	20.00	0	105	86.9	124				
1,4-Dichlorobenzene	20.8	1.00	20.00	0	104	86.8	123				
1,2-Dichlorobenzene	20.8	1.00	20.00	0	104	85.5	126				
1,2-Dibromo-3-chloropropane	18.7	1.00	20.00	0	93.4	40.6	171				
Hexachloro-1,3-butadiene	20.0	4.00	20.00	0	100	65.1	145				
1,2,3-Trichlorobenzene	19.1	4.00	20.00	0	95.5	34	179				
Surr: Dibromofluoromethane	26.2		25.00		105	81.1	118				
Surr: Toluene-d8	25.4		25.00		102	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	84.2	111				

Sample ID: **2005132-003AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183328**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	14.1	1.00	20.00	0	70.5	6.11	189	13.89	1.54	30	
Chloromethane	17.1	2.00	20.00	0	85.4	23.9	203	16.21	5.21	30	
Vinyl chloride	19.1	0.200	20.00	0	95.4	53.4	152	19.00	0.352	30	
Bromomethane	19.0	1.00	20.00	0	94.9	29.7	169	20.29	6.68	30	
Trichlorofluoromethane (CFC-11)	20.6	1.00	20.00	0	103	76.7	132	20.53	0.390	30	
Chloroethane	19.9	1.00	20.00	0	99.7	62.5	149	20.30	1.78	30	
1,1-Dichloroethene	21.7	1.00	20.00	0	109	84.5	127	21.43	1.31	30	
Methylene chloride	21.1	1.00	20.00	0	106	79.9	125	20.92	1.06	30	
trans-1,2-Dichloroethene	21.5	1.00	20.00	0	108	86.2	125	21.40	0.518	30	
1,1-Dichloroethane	20.6	1.00	20.00	0	103	78.4	131	20.48	0.372	30	
cis-1,2-Dichloroethene	20.9	1.00	20.00	0	104	84.5	124	20.75	0.534	30	

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005132-003AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183328**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	27.2	1.00	20.00	6.333	104	75.2	131	27.67	1.68	30	
1,1,1-Trichloroethane (TCA)	21.0	1.00	20.00	0	105	80.4	131	21.02	0.216	30	
1,1-Dichloropropene	21.2	1.00	20.00	0	106	84.2	129	21.06	0.425	30	
Carbon tetrachloride	21.1	1.00	20.00	0	105	81.3	130	21.20	0.475	30	
1,2-Dichloroethane (EDC)	20.2	1.00	20.00	0	101	74.8	130	20.31	0.637	30	
Trichloroethene (TCE)	21.4	0.500	20.00	0	107	82.7	128	21.64	1.11	30	
1,2-Dichloropropane	20.9	1.00	20.00	0	105	78.2	130	20.97	0.323	30	
Bromodichloromethane	20.5	1.00	20.00	0	103	75.2	130	20.87	1.77	30	
Dibromomethane	20.7	1.00	20.00	0	104	74.7	129	20.96	1.14	30	
cis-1,3-Dichloropropene	20.2	1.00	20.00	0	101	66.8	129	20.52	1.38	30	
trans-1,3-Dichloropropylene	19.9	1.00	20.00	0	99.3	62.6	132	20.05	0.900	30	
1,1,2-Trichloroethane	21.4	1.00	20.00	0	107	70.9	135	21.74	1.75	30	
1,3-Dichloropropane	21.0	1.00	20.00	0	105	70.5	132	21.30	1.19	30	
Tetrachloroethene (PCE)	21.5	1.00	20.00	0	107	83.2	128	21.60	0.626	30	
Dibromochloromethane	21.4	1.00	20.00	0	107	72.9	130	21.78	1.92	30	
1,2-Dibromoethane (EDB)	20.9	0.250	20.00	0	104	69.3	132	21.17	1.37	30	
Chlorobenzene	20.8	1.00	20.00	0	104	87.8	120	20.75	0.456	30	
1,1,1,2-Tetrachloroethane	20.8	1.00	20.00	0	104	86.1	119	20.73	0.122	30	
Bromoform	20.7	2.00	20.00	0	103	72.7	127	20.56	0.564	30	
1,1,2,2-Tetrachloroethane	20.4	1.00	20.00	0	102	72.6	133	20.31	0.642	30	
Bromobenzene	20.6	1.00	20.00	0	103	81.4	126	20.53	0.487	30	
2-Chlorotoluene	21.1	1.00	20.00	0	105	70.2	143	20.86	1.00	30	
4-Chlorotoluene	20.4	1.00	20.00	0	102	73.5	136	20.47	0.183	30	
1,2,3-Trichloropropane	20.1	1.00	20.00	0	101	62.4	136	19.21	4.72	30	
1,2,4-Trichlorobenzene	19.5	2.00	20.00	0	97.6	52.7	158	18.25	6.75	30	
1,3-Dichlorobenzene	21.2	1.00	20.00	0	106	86.9	124	20.93	1.09	30	
1,4-Dichlorobenzene	21.2	1.00	20.00	0	106	86.8	123	20.84	1.67	30	
1,2-Dichlorobenzene	21.2	1.00	20.00	0	106	85.5	126	20.80	1.84	30	
1,2-Dibromo-3-chloropropane	19.4	1.00	20.00	0	97.2	40.6	171	18.67	4.03	30	

Work Order: 2005099
CLIENT: O'Neill Service Group
Project: F200

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005132-003AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **5/15/2020** RunNo: **59216**
Client ID: **BATCH** Batch ID: **28339** Analysis Date: **5/15/2020** SeqNo: **1183328**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	21.1	4.00	20.00	0	106	65.1	145	20.01	5.48	30	
1,2,3-Trichlorobenzene	20.2	4.00	20.00	0	101	34	179	19.09	5.50	30	
Surr: Dibromofluoromethane	26.0		25.00		104	81.1	118		0		
Surr: Toluene-d8	25.0		25.00		100	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.6		25.00		102	84.2	111		0		

Sample Log-In Check List

Client Name:	**ONEILL**	Work Order Number:	**2005099**
Logged by:	**Carissa True**	Date Received:	**5/11/2020 4:45:00 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 >2°C to 6°C *	Yes	☐	No	☑	NA ☐
	Samples were collected the same day and chilled.					
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 1	6.2
Sample 1	6.3
Temp Blank 1	13.2

* 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: 5/11/20 Page: 1 of: 1

Laboratory Project No (internal): 2005099

Project Name: F200

Project No: 2024

Client: OSG

Address:

City, State, Zip:

Telephone:

Fax:

Collected by: ATK-S

Location: FLSD

Report To (PM): ATK-S

PM Email:

Special Remarks:

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

	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)	Comments
1	358-BG-GW	5/11/20	1015	GW	4	X														
2	358-BZ-GW	5/11/20	1440	GW	4	X														
3	TRIP BLANK	5/6/20	—	—	2	X														
4																				
5																				
6																				
7																				
8																				
9																				
10																				

*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

Turn-around Time:

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

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 [signature]	5/11/20 - 1625	x [signature]	5/11/20 1645
Relinquished	Date/Time	Received	Date/Time
x		x	