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Mr. Kevin Dana
Oregon Dept. of Environmental Quality
700 NE Multnomah St., Suite 600
Portland, OR 97232

Wednesday, May 13, 2020

Re: May 2020 Project Update and Work Plan
Arcoa Building/Allyn's Cleaners
1006 SE Grand Ave
Portland, Oregon
ECSI #6199

Point Source Solutions Project No.: OR190517-3

Kevin,

The following memo is intended to provide a comprehensive up-to-date summary of project activities and data related to the release of Stoddard Solvent at the Arcoa Building located at 1006 SE Grand Avenue (Site).

BACKGROUND

In 2013 Chugwater, LLC performed an Environmental Subsurface Investigation on the Arcoa Building, located at 1006 SE Grand Avenue, Portland, Oregon 97214 ("Property"). The investigation was performed to investigate Recognized Environmental Conditions (RECs) identified in a Phase I Environmental Site Assessment (PH I ESA) (project CW121116.2) performed by Chugwater for Killian Pacific LLC in December 2012. Findings included the following:

- Stoddard Solvent and volatile organic compounds likely associated with the past use of dry cleaning chemicals on the Property were detected in SB1, SB2, SB2B, SB7 and SB8 in the drive to the south of the Arcoa Building. Soil vapor levels of these compounds do not exceed the cleanup criteria for soil vapor intrusion into buildings in an occupational setting.

- Chloroform in soil was detected maximum concentration of 2.7 mg/kg. This concentration exceeds the cleanup criteria for soil vapor intrusion into buildings in an occupational setting. Chloroform in soil gas beneath the Arcoa Building was detected at a maximum concentration of 19,000 ug/m3 which exceeds the cleanup criteria for soil vapor intrusion into buildings in an occupational setting.

- Other than chloroform in the soil vapor sample collected from beneath the Arcoa Building (SV3), soil gas concentrations did not exceed the cleanup criteria for soil gas intrusion into buildings in an occupational setting.

In 2017 and 2018 Point Source performed environmental subsurface investigations of the south adjoining properties at 1024 SE Grand Avenue and 521 SE Taylor Street (PSS Project #OR161202-3A-D) to investigate RECs identified during Phase I ESAs performed at the properties. Stoddard solvent, believed to be present as a result of former dry cleaning activities at the Arcoa Building, was determined to have impacted soil, groundwater and soil-vapor on both properties. Results from the investigations prepared for 1024 SE Grand Avenue are summarized below.

- Gasoline-range hydrocarbons (Stoddard solvent) and VOCs were detected in soil and groundwater samples collected during project activities.

- VOCs were detected in the sub-slab and soil-gas vapor samples.

- None of the concentrations detected exceed vapor-intrusion into buildings RBCs for residential receptors, with the exception of gasoline-range hydrocarbons in soil for SB28 collected on the west property line of 1024 SE Grand Ave.

- As expected, concentrations in soil and groundwater were highest near the suspected historical source of the release on the north adjoining Arcoa Building property (W26).

- Gasoline range hydrocarbons (Stoddard solvent) were not detected in a groundwater sample collected on the south property line of 1024 SE Grand Ave (W27). VOCs were detected in this sample, however given the low concentrations detected it is unlikely that significant off-site migration to the south is occurring.

- Gasoline range hydrocarbons (Stoddard solvent) and VOCs were detected in a soil sample collected on the west property line (SB28) and in a groundwater sample collected in the southwest corner of the Site (W29). The concentrations detected are minor relative to those detected in the vicinity of the source (W26); however it is likely that some off-site migration is occurring.

ODEQ reviewed the initial reporting prepared by Point Source and requested the following additional work to be performed to further characterize this release:

- Soil contamination needs to be fully delineated to the west, north and southeast.

- Groundwater impact needs to be fully delineated around the site. Monitoring wells are be installed which will require a minimum of four consecutive quarters of monitoring.

- Groundwater flow direction will need to be determined by monitoring wells. Groundwater flow is likely to the west towards the Willamette River.

- Additional soil gas samples should be collected in the vicinity of the highest soil and groundwater concentrations detected within the impacted plumes, and within the Site building.

- Soil and groundwater samples should be analyzed for EPH/VPH in lieu of NWTPH-GX to develop site specific screening levels for Stoddard solvent.

In August 2019 monitoring wells MW1 through MW5 were installed by Cascade Technical Services under supervision by Point Source Solutions at locations intended to evaluate stability of the groundwater plume, off-site migration, and to provide data on seasonal variations in the direction of ground water flow. The monitoring wells were installed as follows:

- Soils were screened from ground-surface for the purpose of further characterizing the impacted soil plume, and for locating the soil-water interface (SWI).

- Soil samples were collected from zones that represented “worst-case” contamination identified during the previous site investigations, and field screening.

- Select soil samples were analyzed for TPH-Dx/Gx, VOCs, and APH/VPH.

- ¾-inch monitoring wells were installed in the bore holes. A 10.0-foot screened interval was utilized to account for seasonal variations in the static water-level (SWL).

- Top-of-casing (TOC) for each monitoring well was surveyed in reference to the COP Datum and COP benchmark #1818, located in the sidewalk on the northwest corner of the intersection of SE Grand Avenue and SE Taylor Street.

MW through MW5 were developed, and quarterly groundwater monitoring events were performed in October 2019, February 2020, and May 2020. Laboratory analytical data is pending for the May 2020 event, however potentiometric surface data and groundwater contour diagrams are discussed in the proceeding section. The next quarterly groundwater monitoring event, if needed, will be performed in August 2020.

The Site and vicinity, soil and groundwater borings, soil vapor sample locations, and monitoring well locations are depicted in the attached Figures 1 through Figure 5.

POTENTIOMETRIC SURFACE DATA EVALUATION

Monitoring well construction details and water-level measurements collected during the October 2019, February 2020, and May 2020 groundwater monitoring events are summarized below in Table 1.

Water level data is plotted and contoured as depicted on Figures 6 through 8. The potentiometric surface for groundwater flow indicates a generally southwest to west-southwest flow towards the Willamette River located approximately 0.37 miles due west of the Site.

TABLE 1: MONITORING WELL TOC AND SWL ELEVATIONS

	MW1	MW2	MW3	MW4	MW5
TOC Elevation	49.29	49.48	53.29	53.59	52.74
SWL Elevation – October 2019	24.35	24.48	22.99	22.69	24.43
SWL Elevation – February 2020	25.19	25.27	25.14	24.19	25.26
SWL Elevation – May 2020					

Table 1 Note:

Elevations for TOC and SWL are in reference to the COP Datum. Point Source utilized COP benchmark #1818, elevation 53.408 ft for establishing monitoring well TOC elevations.

LABORATORY ANALYTICAL RESULTS

Soil and groundwater samples were transported under chain of custody to Wy'East Environmental Sciences of Portland, Oregon and Apex Labs of Portland, Oregon. Apex Labs subcontracted Fremont Analytical of Seattle, Washington to provide EPH/VPH analysis.

Soil and groundwater samples were analyzed by NWTPH-Gx for gasoline-range hydrocarbons, EPH/VPH for aliphatic/aromatic hydrocarbons (for site specific risk assessment from Stoddard Solvent) and EPA 8260 for VOCs.

Sub-slab and soil-gas vapor samples were transported under chain of custody to Friedman and Bruya Inc. in Seattle, Washington.

Vapor samples were analyzed by for gasoline-range hydrocarbons, and APH for aliphatic/aromatic hydrocarbons (for site specific risk assessment from Stoddard Solvent) and EPA 8260 for VOCs.

Laboratory analytical reports and chain-of-custody forms are included as Appendix A.

Analytical results are summarized in Tables 2, 3 and 4 below.

TABLE 2- SOIL SAMPLES BY NWTPH-GX/NWTPH-DX/APH-VPH/EPA 8260
LABORATORY ANALYTICAL RESULTS (MG/KG)

Sample	Depth	Date	GX/DX	APH/VPH	VOCs
DECEMBER 2012/FEBRUARY 2013 SAMPLING EVENT					
SB1-S1	8.0'	12/15/2012	ND	not analyzed	Benzene – 0.13 Ethylbenzene – 0.76 Xylenes – 2.1 Isopropylbenzene – 1.5 135 TMB – 8.4 124 TMB - 16 Naphthalene – 0.14
SB1-S2	17.0'	12/15/2012	ND	not analyzed	ND
SB2-S1	8.0'	12/15/2012	DX – 7,100	not analyzed	1,1-DCE – 0.05 **Chloroform – 2.7** **EDC – 2.5** **Benzene - 93** TCE – 1.1 Toluene - 40 **PCE – 8.6** Ethylbenzene - 18 **Xylenes - 170** Isopropylbenzene - 27 **135 TMB - 150** **124 TMB - 310** **Naphthalene - 12**
SB2-S2	17.0'	12/15/2012	ND	not analyzed	124 TMB - 60
SB2B-S1	28.0'	2/15/2013	GX – 65	not analyzed	PCE – 0.3 135 TMB – 0.16 124 TMB – 0.32
SB3-S1	8.0'	12/15/2012	ND	not analyzed	not analyzed
SB3-S2	15.0'	12/15/2012	ND	not analyzed	not analyzed
SB4-S1	8.0'	12/15/2012	ND	not analyzed	not analyzed
SB4-S2	14.0'	12/15/2012	ND	not analyzed	not analyzed
SB5-S1	8.0'	12/15/2012	ND	not analyzed	not analyzed
SB5-S2	14.0'	12/15/2012	ND	not analyzed	not analyzed
SB6-S1	8.0'	12/15/2012	ND	not analyzed	not analyzed
SB6-S2	15.0'	12/15/2012	ND	not analyzed	not analyzed
SB8-S1	14.0'	2/15/2013	**GX – 310**	not analyzed	Ethylbenzene – 0.16 Xylenes - 0.38 Isopropylbenzene – 0.50 135 TMB – 3.5 124 TMB – 12
JANUARY 2017 SAMPLING EVENT					
SB15-S1	12.0'	1/06/17	ND	not analyzed	ND
SB16-S1	11.0'	1/06/17	**GX – 21,800**	not analyzed	**Benzene – 1.27**

TABLE 2- SOIL SAMPLES BY NWTPH-GX/NWTPH-DX/APH-VPH/EPA 8260 LABORATORY ANALYTICAL RESULTS (MG/KG)					
Sample	**Depth**	**Date**	**GX/DX**	**APH/VPH**	**VOCs**
					Ethylbenzene – 17.9 Isopropylbenzene – 13.9 **Naphthalene – 13.8** **124 TMB - 152** 135 TMB - 44.0 Xylenes – 59.4
SB16-S2	16.5’	1/06/17	GX – 79	not analyzed	124 TMB – 0.410
SB17-S1	12.0’	1/06/17	ND	not analyzed	ND
SB18-S1	9.5’	1/06/17	GX – 73	not analyzed	124 TMB – 0.478
SB18-S2	17.0’	1/06/17	**GX – 6,540**	not analyzed	Ethylbenzene – 4.42 Isopropylbenzene – 4.37 **Naphthalene – 3.76** **124 TMB - 48.3** 135 TMB - 17.4 Xylenes – 6.8
MARCH 2017 SAMPLING EVENT					
SB19-S1-10	10.0’	3/14/2017	ND	not analyzed	124 TMB – 103
SB19-S2-17.5	17.5’	3/14/2017	ND	not analyzed	ND
SB20-S1-10	10.0’	3/14/2017	**GX – 15,000**	not analyzed	Ethylbenzene – 1.82 Isopropylbenzene – 5.32 124 TMB – 99.6 Xylenes – 18.61
SB20-S2-18	18.0’	3/14/2017	ND	not analyzed	ND
SB21-S1-16	16.0’	3/14/2017	ND	not analyzed	ND
SB22-S1-12	12.0’	3/22/2017	**GX – 13,800**	not analyzed	**Ethylbenzene – 2.48** Isopropylbenzene – 7.06 Naphthalene – 5.88 **TCE – 2.07** 124 TMB – 79.0 135 TMB – 5.25 Xylenes – 15.26
SB23-S1-12	12.0’	3/22/2017	**GX – 15,000**	not analyzed	**Benzene – 0.338** **Ethylbenzene – 17.6** Isopropylbenzene – 25.9 **Naphthalene – 27.9** PCE –1.43 **TCE –12.9** **124 TMB – 299.0** **135 TMB – 103.0** Xylenes – 80.1
SB24-S1-4.5	4.5’	3/22/2017	**GX – 18,300**	not analyzed	**Benzene – 1.02** **Ethylbenzene – 8.18** Isopropylbenzene – 26.1 **Naphthalene – 37.4** **TCE –4.91** **124 TMB – 325.0** **135 TMB – 139.0**

TABLE 2- SOIL SAMPLES BY NWTPH-GX/NWTPH-DX/APH-VPH/EPA 8260
LABORATORY ANALYTICAL RESULTS (MG/KG)

Sample	Depth	Date	GX/DX	APH/VPH	VOCs
					Xylenes – 62.1
SB24-S2-13.7	13.7'	3/22/2017	**GX – 114**	not analyzed	Benzene – 0.0987 Ethylbenzene – 0.06 TCE – 0.0954 124 TMB – 0.836 135 TMB – 0.290
SB25-S1-14	14.0'	3/22/2017	ND	not analyzed	TCE – 0.047
MAY 2018 SAMPLING EVENT					
SB28-S1-30	30.0'	5/30/2018	**GX – 2,060**	not analyzed	Isopropylbenzene – 0.308
AUGUST 2019 SAMPLING EVENT					
MW1-S1-26	26.0'	8/28/2019	GX – ND DX – ND	ND	not analyzed
MW2-S1-30	30.0'	8/28/2019	GX – ND DX – ND	ND	not analyzed
MW3-S1-36	36.0'	8/29/2019	**GX – 194** DX – ND	EPH - ND VPH - Aliphatic (C8-C10) – 33.2 Aliphatic (C10-C12) – 24.5 Aromatic C8-C10) – 37.9 Aromatic (C10-C12) – 49.1 Aromatic (C12-C13) – 22.7	not analyzed
MW4-S1-15	15.0'	8/29/2019	**GX – 556** DX – 89.3	EPH - Aliphatic (C8-C10) – 417 Aliphatic (C10-C12) – 158 Aromatic (C8-C10) – 27.4 Aromatic (C10-C12) – 20.6 VPH – Aliphatic C6-C8) – 4.47 Aliphatic (C8-C10) – 76.6 Aliphatic (C10-C12) – 61.6 Aromatic (C8-C10) – 117 Aromatic (C10-C12) – 133	not analyzed
MW4-S3-34	34.0'	8/29/2019	**GX – 673** DX – ND	not analyzed	not analyzed
MW4-S2-39	39.0'	8/29/2019	GX – ND DX – ND	EPH – ND VPH – Aromatic (C10-C12) – 0.617 Aromatic (C12-C13) – 4.35	not analyzed
MW5-S1-9	9.0'	8/29/2019	**GX – 23,100** DX – ND	EPH – Aliphatic (C8-C10) – 1,180 Aliphatic (C10-C12) – 418 Aromatic (C8-C10) – 111 Aromatic (C10-C12) – 51.6 VPH – Aliphatic (C6-C8) – 46.8 Aliphatic (C8-C10) – 2,830	not analyzed

TABLE 2- SOIL SAMPLES BY NWTPH-GX/NWTPH-DX/APH-VPH/EPA 8260
LABORATORY ANALYTICAL RESULTS (MG/KG)

Sample	Depth	Date	GX/DX	APH/VPH	VOCs
				Aliphatic (C10-C12) – 2,450 Aromatic (C8-C10) – 2,780 Aromatic (C10-C12) – 2,370 Aromatic (C12-C13) – 240	
MW5-S2-31	31.0'	8/29/2019	**GX – 535** Oil – 92.7	not analyzed	not analyzed
ODEQ Soil Vapor Intrusion into Buildings – Residential Setting (most stringent screening level)			**GX - 94** **DX - No Value**	**No Value**	**Benzene – 0.16** **Chloroform – 0.031** **EDC – 0.077** **Ethylbenzene – 1.3** **Naphthalene – 6.4** **PCE – 2.8** **TCE – 0.12** **124 TMB – 140** **135 TMB – 98**

TABLE 3- GROUNDWATER SAMPLES BY NWTPH-GX/NWEPH/NWVPH/EPA 8260
LABORATORY ANALYTICAL RESULTS (UG/L)

Sample	Date	GX/DX	EPH/VPH	VOCs
FEBRUARY 2013 SAMPLING EVENT				
SB2B-W1	2/15/2013	GX – 2,200 Dx – ND	not analyzed	Benzene – 3.4 Cis-1,2-DCE – 1.6 Chloroform – 35 Isopropylbenzene – 9.9 Napthalene – 14 TCE – 5.1 PCE – 53 Xylenes – 37 135 TMB – 57 124 TMB – 140
MAY 2018 PSS SAMPLING EVENT				
W26	5/31/2018	GX – 1,460	not analyzed	Chloroform – 4.33 PCE – 0.428 124 TMB – 6.94 135 TMB – 3.52 Xylenes – 0.887
W27	5/31/2018	ND	not analyzed	Chloroform – 4.25 PCE – 0.863
W29	5/31/2018	GX - 833	not analyzed	Chloroform – 2.01 cis-1,2-DCE – 1.01 PCE – 0.891
OCTOBER 2019 GROUNDWATER MONITORING EVENT				
MW1	10/22/2019	ND	not analyzed	TCE – 0.550
MW2	10/22/2019	ND	not analyzed	PCE – 0.550
MW3	10/22/2019	ND	not analyzed	T PCE – 0.570

TABLE 3- GROUNDWATER SAMPLES BY NWTPH-GX/NWEPH/NWVPH/EPA 8260 LABORATORY ANALYTICAL RESULTS (UG/L)				
Sample	**Date**	**GX/DX**	**EPH/VPH**	**VOCs**
MW4	10/22/2019	GX – 941 DX – ND	EPH - ND VPH – Aliphatic (C6-C8) – 49.9 Aliphatic (C8-C10) – 103 Aromatic (C8-C10) – 116 Aromatic (C10-C12) – 292	Cis-1,2-DCE – 0.620 Ethylbenzene – 0.770 Isopropylbenzene – 6.05 124 TMB – 10.6 135 TMB – 1.80 Vinyl Chloride – 0.550
MW5	10/22/2019	ND	EPH - ND VPH – ND	Chloroform – 2.76 PCE – 0.940 TCE - 0.760
FEBRUARY 2020 GROUNDWATER MONITORING EVENT				
MW1	02/04/2020	ND	not analyzed	ND
MW2	02/04/2020	ND	not analyzed	ND
MW3	02/04/2020	ND	not analyzed	ND
MW4	02/04/2020	GX - 1,100 DX - 125	not analyzed	Benzene – 0.215 Cis-1,2-DCE – 0.747 Ethylbenzene – 1.32 Isopropylbenzene – 7.07 124 TMB – 16.0 135 TMB – 2.24 Vinyl Chloride – 0.614
MW5	02/04/2020	ND	not analyzed	PCE – 0.503 Chloroform – 2.76
ODEQ Groundwater Vapor Intrusion into Buildings – Residential Setting (most stringent screening level)		**no exceedance**	**no value**	**no exceedance**

TABLE 4- VAPOR SAMPLES BY GRO/MA-APH/EPA METHOD 8260 TO-15 LABORATORY ANALYTICAL RESULTS (UG/M3)				
Sample	**Date**	**GRO**	**APH**	**VOCs**
MARCH 2017 SAMPLING EVENT				
SS2	3/14/2017	ND	not analyzed	Toluene – 5.2 PCE – 23 Xylenes – 11.7 Naphthalene – 2.6
MAY 2018 SAMPLING EVENT				
SV3	5/30/2018	ND	not analyzed	Toluene – 4.5 PCE – 10 Naphthalene – 1.3
SV4	5/30/2018	ND	not analyzed	Chloroform – 11 Toluene – 4.7 PCE – 10
SV5	5/30/2018	ND	not analyzed	Chloroform – 4.1 Toluene – 6.6 PCE – 9.0

TABLE 4- VAPOR SAMPLES BY GRO/MA-APH/EPA METHOD 8260 TO-15 LABORATORY ANALYTICAL RESULTS (UG/M3)				
Sample	**Date**	**GRO**	**APH**	**VOCs**
				Chlorobenzene – 17 Ethylbenzene – 6.5 Naphthalene – 1.7
DECEMBER 2019 SAMPLING EVENT				
SV1	12/17/2019	1,500,000	aliphatics (EC5-8) – 440,000 aliphatics (EC9-12) – 770,000 aromatics (EC9-10) – 46,000	**Benzene – 240** **TCE – 220** PCE – 1,500 **Ethylbenzene – 610** Isopropylbenzene – 1,100 Xylenes – 2,700 135 TMB – 8,400 124 TMB – 7,800
SS1	12/17/2019	ND	not analyzed	Chloroform – 14 EDC – 0.15 Carbon tetrachloride – 2.7 Trichloroethene (TCE) – 3.6 Xylenes – 3.2
ODEQ Soil Gas Vapor Intrusion into Buildings – Residential Setting (most stringent screening level)		**no exceedance**	**no value**	**Benzene – 72** **Ethylbenzene – 220** **TCE – 95**

Table Notes:

ND = Not detected above Method Detection Limit

Cleanup criteria for compounds noted in the tables are established in the manual titled *"Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites"* prepared by the ODEQ revised May 2018. Vapor Intrusion into Buildings in a Residential Setting is the most stringent cleanup level.

VOCs which were detected but not regulated are not presented in this table.

CONCLUSIONS

The laboratory analytical and potentiometric surface data indicate the following:

- VOCs in soil and soil-gas vapor were detected at concentrations that exceed ODEQ RBCS for the most stringent exposure scenarios (vapor intrusion-residential).
- Gasoline-range hydrocarbons (Stoddard Solvent) were detected in soil, soil-gas, and groundwater samples collected during project activities. EPH, VPH, and APH carbon fraction data should be utilized to develop site specific RBCs to determine if conditions are protective of human health and the environment for applicable exposure scenarios.
- Potentiometric surface data collected from the on-site monitoring wells indicates that groundwater flow is generally to the west towards the Willamette River.
- Based on data collected during the installation of MW1 and MW2 it does not appear that off-site migration of impacted soil or groundwater is occurring to the north, or to the east.
- Based on data collected during the May 2018 sampling event, and from the installation of MW4 it appears that some off-site migration is likely occurring to the west and southwest.

The information provided in this report describes the work performed and provides documentation of the data and evaluation that constitutes the factual findings of the investigation.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Prepared by:

Andy Klopfenstein, E.I.T.

Reviewed by:

Gil Cobb, RG

Registered Geologist (Oregon #G1440)

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Expires 12/31/2020

FIGURES

Figure 1	Site Location Map
Figure 2	Topographic Map
Figure 3	Soil Sample Locations
Figure 4	GW Sample Locations
Figure 5	SV Sample Locations
Figure 6	Oct 2019 Contour
Figure 7	Feb 2020 Contour

APPENDICES

Appendix A	Laboratory Analytical Reports

FIGURES

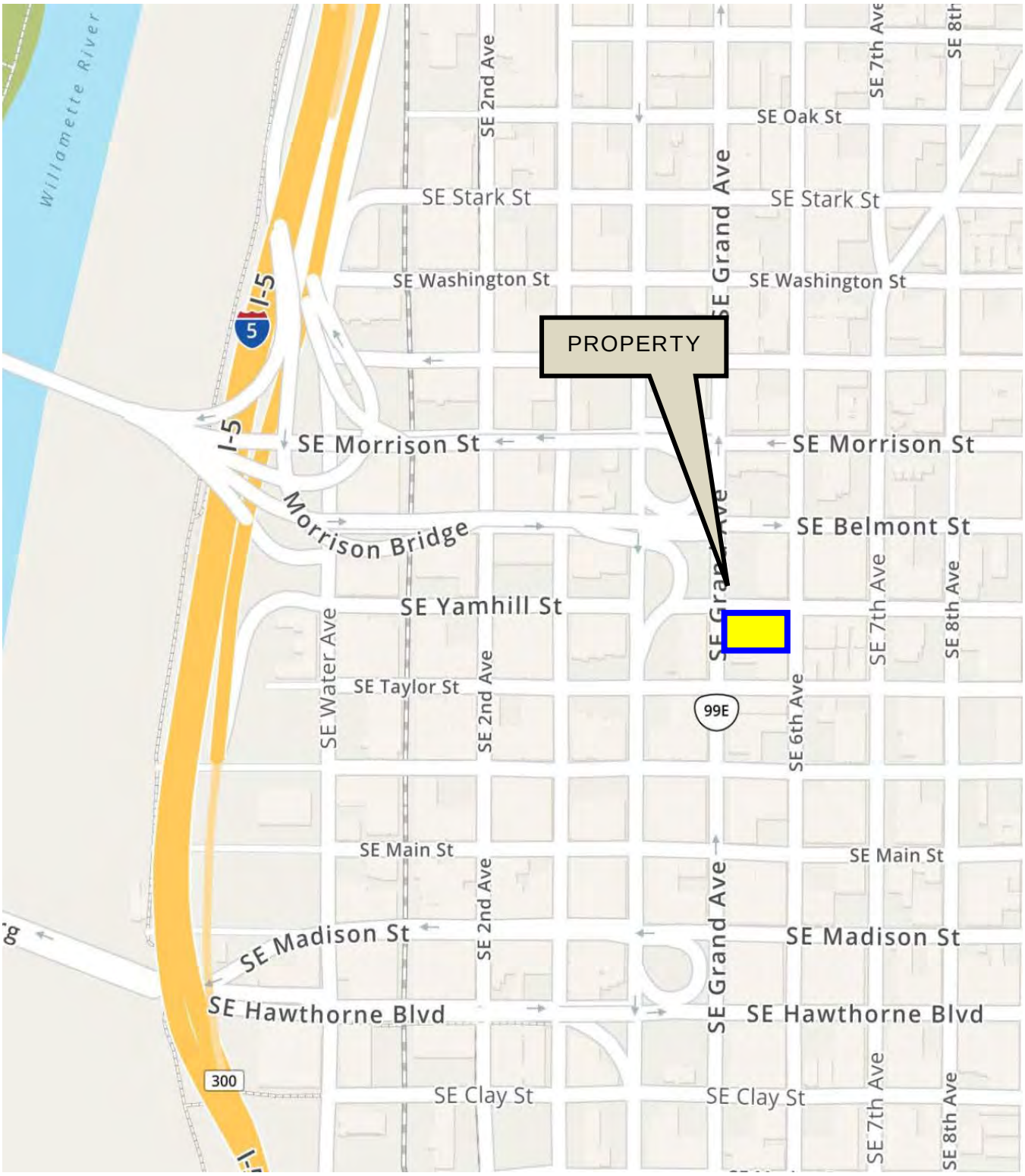

FIGURE 1 - SITE LOCATION MAP

Map from MapQuest **N↑**

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Site Name: Arcoa Building
1006 SE Grand Avenue
Portland, OR

Project Number: OR190517-3

FIGURE 2 - TOPOGRAPHIC MAP

Source: USGS 7.5 Minute Topographic Map
Portland, OR Quadrangle 1984

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Site Name: Arcoa Building
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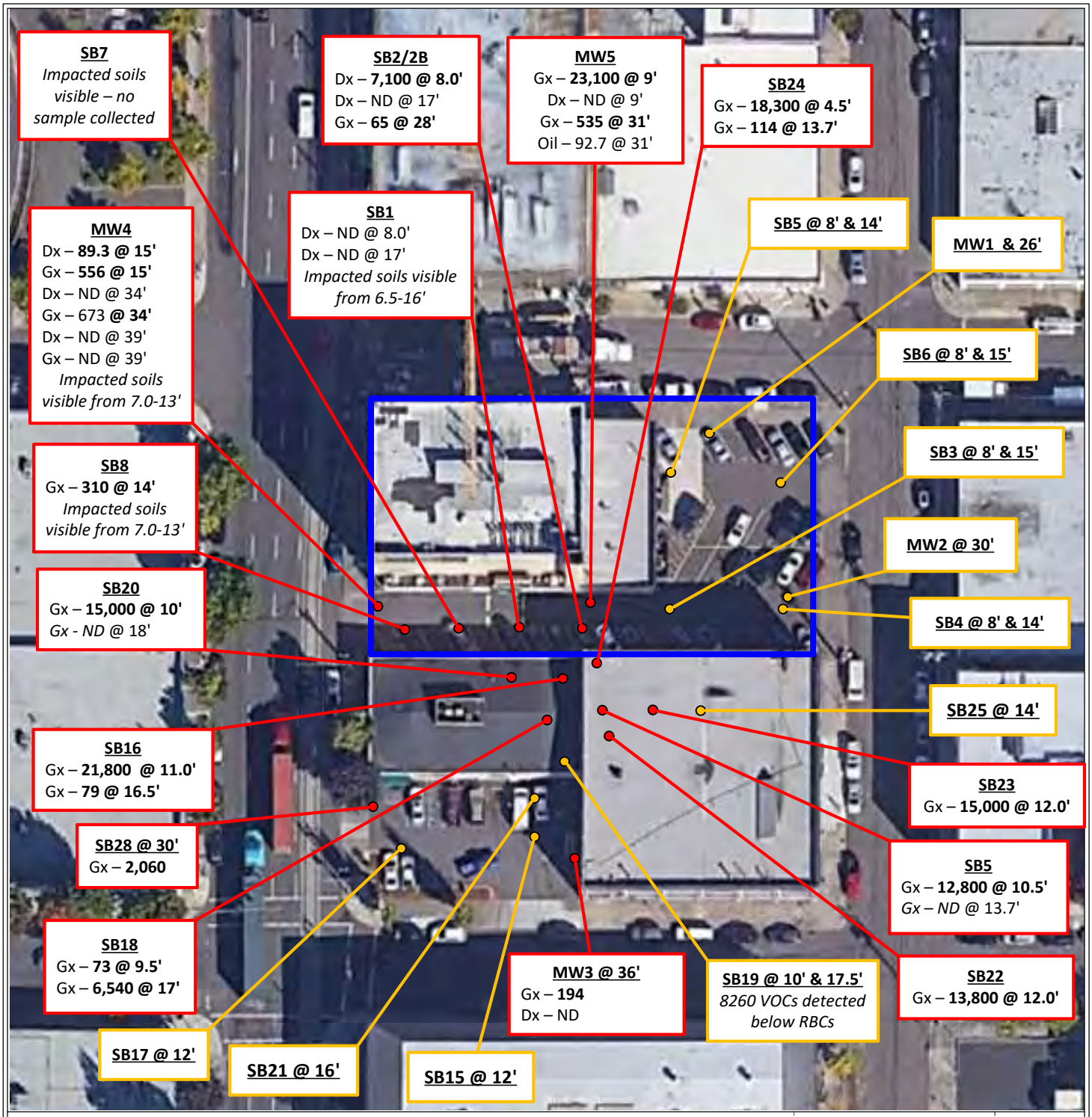

FIGURE 3 - SOIL SAMPLE LOCATION DIAGRAM

Image From Google Earth (2018)

N↑

Notes:

- *Soil Sample results in mg/Kg*
- *Results depicted for TPH-Dx/Gx (stoddard solvent) only*
- *SB15 – SB28 advanced by PSS (2017-2018)*
- *SB1 – SB8 advanced by Chugwater (2013)*
- *MW1 – MW5 advanced by PSS (2019)*

Soil Sample Location

Site Boundary

Soil Sample Location (Stoddard solvent observed/detected)

Scale in Feet (Approximate)

100

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Site Name: Arcoa Building
1006 SE Grand Avenue
Portland, Oregon 97214

FIGURE 4 - WATER SAMPLE LOCATION DIAGRAM

Image From Google Earth (2018)

N↑

Notes:

- *Water Sample results in ug/L*
- *Results depicted for TPH-Dx/Gx (stoddard solvent) only*
- *W26 – W29 collected by PSS (2018)*
- *SB2B-W1 collected by Chugwater (2013)*
- *MW1 – MW5 installed by PSS (2019)*

Water Sample Location

Monitoring Well Location

Site Boundary

Scale in Feet (Approximate)

100

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Site Name: Arcoa Building
1006 SE Grand Avenue
Portland, Oregon 97214

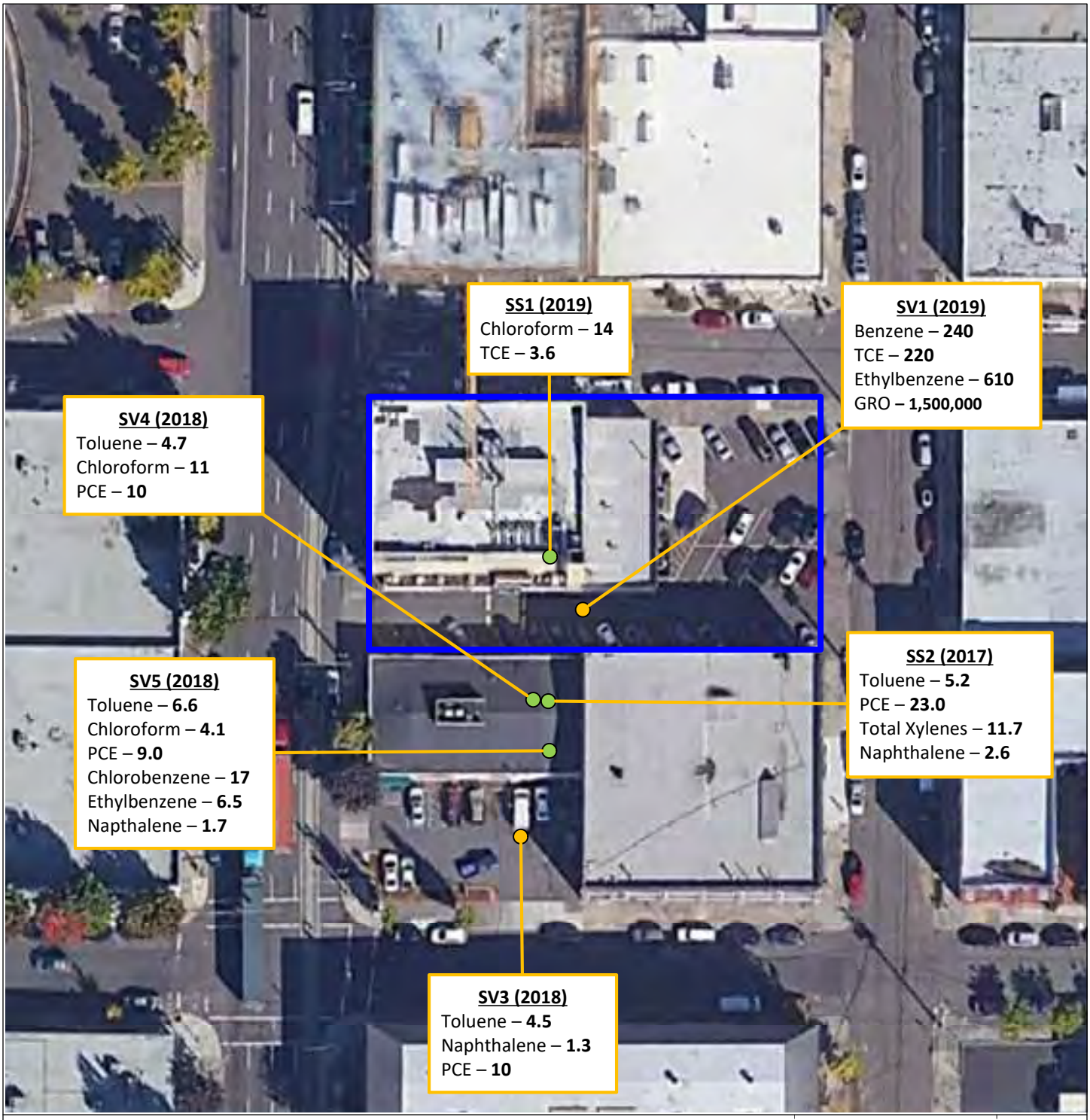

FIGURE 5 - SOIL VAPOR SAMPLE LOCATION DIAGRAM

Image From Google Earth (2018)

N↑

Notes:

- *Soil Vapor results in ug/m3*

Vapor Sample Location (Sub-slab)

Vapor Sample Location (Soil-gas)

Site Boundary

Scale in Feet (Approximate)

100

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Site Name: Arcoa Building
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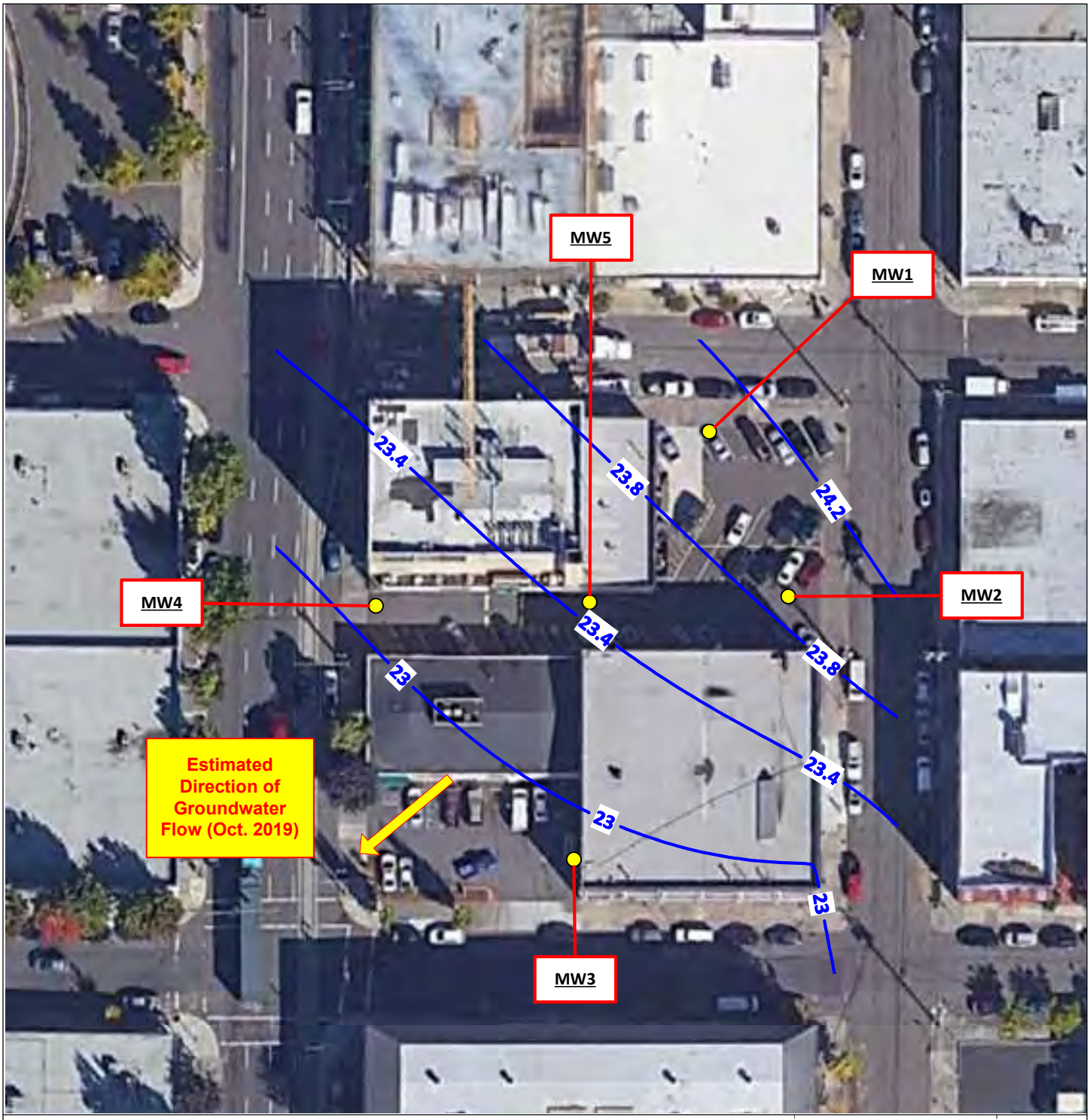
Portland, Oregon 97214



OCT. 2019 GROUNDWATER ELEVATION CONTOURS

Image From Google Earth (2018)

N↑

Notes:

- *GW contour elevations are in reference to the COP Datum.*
- *COP Benchmark #1818, elevation 53.408 ft was utilized for establishing monitoring well TOC elevations.*

Monitoring Well Location

Scale in Feet (Approximate)

100

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Site Name: Arcoa Building
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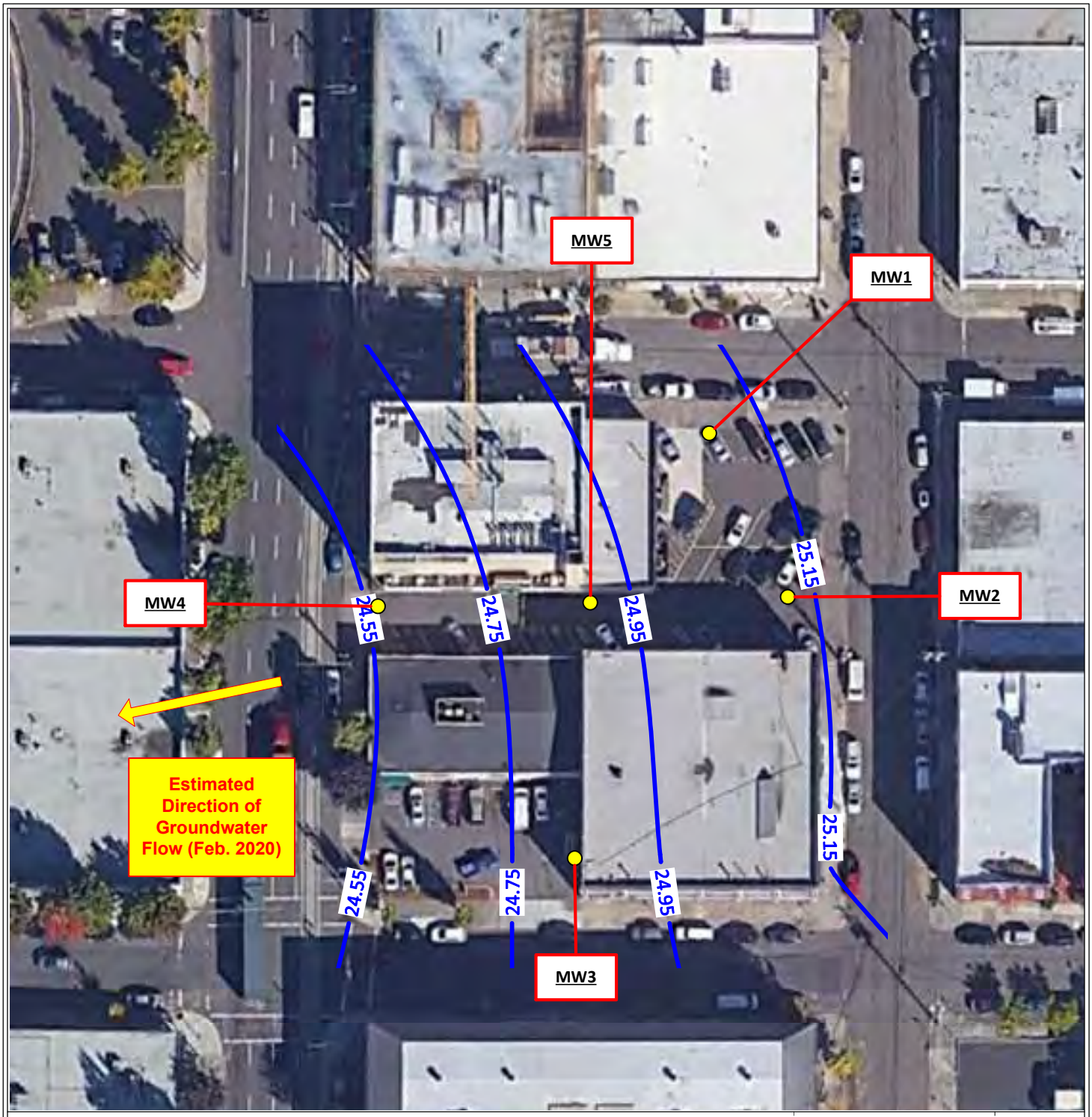

FEB. 2020 GW ELEVATION CONTOURS

Image From Google Earth (2018)

N↑

Notes:

- *GW contour elevations are in reference to the COP Datum.*
- *COP Benchmark #1818, elevation 53.408 ft was utilized for establishing monitoring well TOC elevations.*

Monitoring Well Location

Scale in Feet (Approximate)

100

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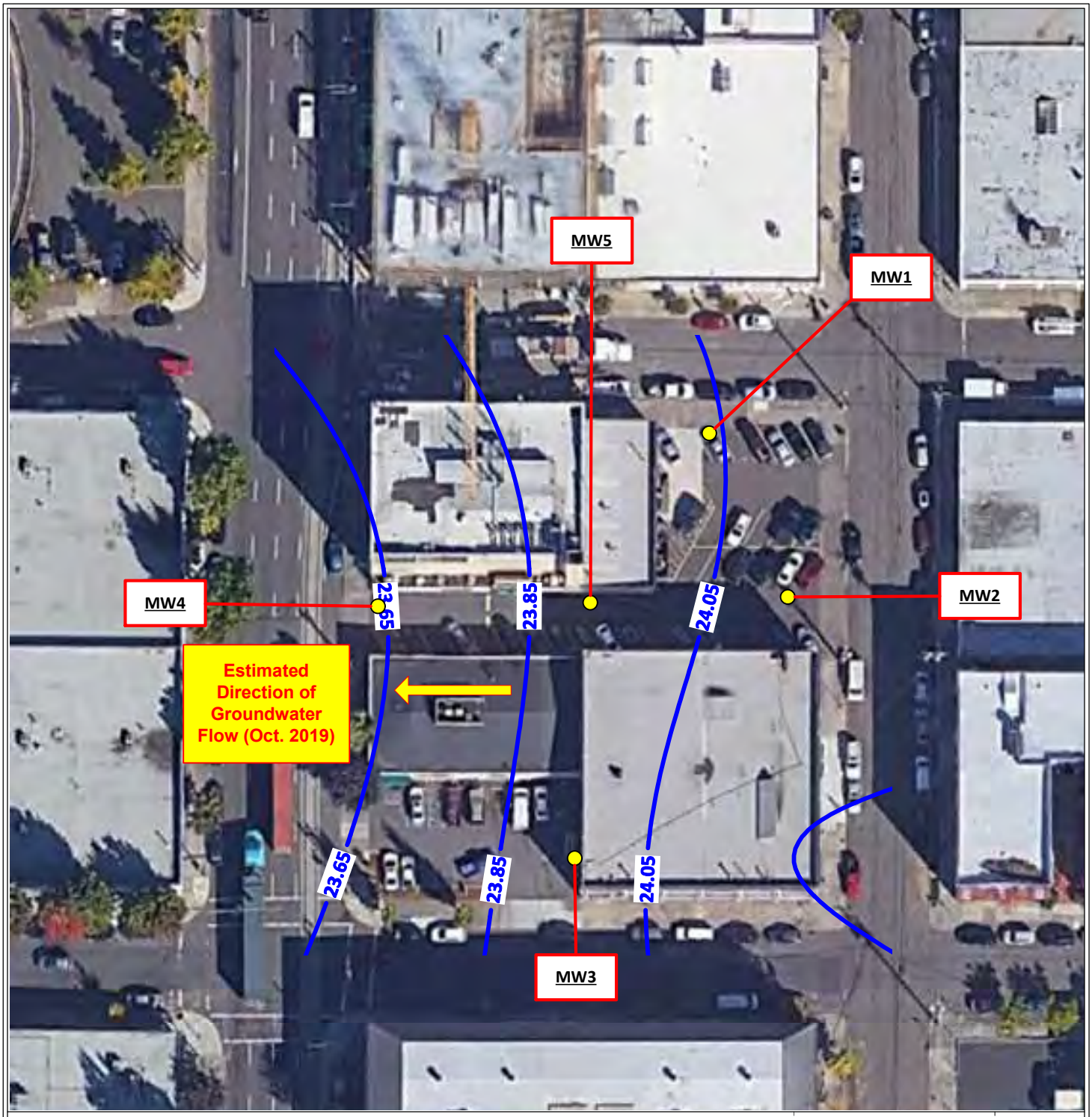
Site Name: Arcoa Building
1006 SE Grand Avenue
Portland, Oregon 97214



MAY 2020 GROUNDWATER ELEVATION CONTOURS

Image From Google Earth (2018)

N↑

Notes:

- *GW contour elevations are in reference to the COP Datum.*
- *COP Benchmark #1818, elevation 53.408 ft was utilized for establishing monitoring well TOC elevations.*

Monitoring Well Location

Scale in Feet (Approximate)

100

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Site Name: Arcoa Building
1006 SE Grand Avenue
Portland, Oregon 97214

APPENDICES

APPENDIX A

LABORATORY ANALYTICAL REPORTS

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Thursday, October 3, 2019

Gil Cobb
Point Source Solutions, LLC
10445 SW Canyon Road Suite 115
Beaverton, OR 97005

RE: A9I0002 - Arcoa Building - OR190501-3

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A9I0002, which was received by the laboratory on 8/30/2019 at 11:12:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: KFriscia@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of final reporting, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.3	degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW1-S1-26	A9I0002-01	Soil	08/28/19 10:04	08/30/19 11:12
MW2-S1-30	A9I0002-02	Soil	08/28/19 14:30	08/30/19 11:12
MW3-S1-36	A9I0002-03	Soil	08/29/19 09:40	08/30/19 11:12
MW4-S1-15	A9I0002-04	Soil	08/29/19 12:10	08/30/19 11:12
MW4-S2-39	A9I0002-05	Soil	08/29/19 12:45	08/30/19 11:12
MW5-S1-9	A9I0002-06	Soil	08/29/19 13:45	08/30/19 11:12
MW4-S3-34	A9I0002-07	Soil	08/29/19 13:00	08/30/19 11:12
MW5-S2-31	A9I0002-08	Soil	08/29/19 15:15	08/30/19 11:12

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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1-S1-26 (A9I0002-01)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.0	mg/kg dry	1	09/11/19 21:37	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	09/11/19 21:37	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 92 %*		*Limits: 50-150 %*	*1*	*09/11/19 21:37*	*NWTPH-Dx*	
MW2-S1-30 (A9I0002-02)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.0	mg/kg dry	1	09/11/19 22:19	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	09/11/19 22:19	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 86 %*		*Limits: 50-150 %*	*1*	*09/11/19 22:19*	*NWTPH-Dx*	
MW3-S1-36 (A9I0002-03)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.0	mg/kg dry	1	09/11/19 22:39	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	09/11/19 22:39	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 92 %*		*Limits: 50-150 %*	*1*	*09/11/19 22:39*	*NWTPH-Dx*	
MW4-S1-15 (A9I0002-04RE1)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	**89.3**	---	51.3	mg/kg dry	2	09/12/19 11:57	NWTPH-Dx	**F-18**
Oil	ND	---	103	mg/kg dry	2	09/12/19 11:57	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 96 %*		*Limits: 50-150 %*	*2*	*09/12/19 11:57*	*NWTPH-Dx*	
MW4-S2-39 (A9I0002-05)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.0	mg/kg dry	1	09/11/19 23:00	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	09/11/19 23:00	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 88 %*		*Limits: 50-150 %*	*1*	*09/11/19 23:00*	*NWTPH-Dx*	
MW5-S1-9 (A9I0002-06)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.3	mg/kg dry	1	09/11/19 23:20	NWTPH-Dx	
Oil	ND	---	50.6	mg/kg dry	1	09/11/19 23:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 90 %*		*Limits: 50-150 %*	*1*	*09/11/19 23:20*	*NWTPH-Dx*	
MW4-S3-34 (A9I0002-07)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.0	mg/kg dry	1	09/11/19 23:41	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	09/11/19 23:41	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*	*1*	*09/11/19 23:41*	*NWTPH-Dx*	
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090729**		
Diesel	ND	---	25.0	mg/kg dry	1	09/12/19 00:01	NWTPH-Dx	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090729**		
Oil	**92.7**	---	50.0	mg/kg dry	1	09/12/19 00:01	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)			*Recovery: 95 %*	*Limits: 50-150 %*	*1*	*09/12/19 00:01*	*NWTPH-Dx*	

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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1-S1-26 (A9I0002-01)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	ND	---	2.27	mg/kg dry	50	09/03/19 14:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*		*Limits: 50-150 %*	*1*	*09/03/19 14:19*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*09/03/19 14:19*	*NWTPH-Gx (MS)*	
MW2-S1-30 (A9I0002-02)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	ND	---	3.12	mg/kg dry	50	09/03/19 15:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*	*1*	*09/03/19 15:13*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*	*1*	*09/03/19 15:13*	*NWTPH-Gx (MS)*	
MW3-S1-36 (A9I0002-03)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	**194**	---	122	mg/kg dry	2000	09/03/19 17:29	NWTPH-Gx (MS)	**F-13**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 122 %*		*Limits: 50-150 %*	*1*	*09/03/19 17:29*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*	*1*	*09/03/19 17:29*	*NWTPH-Gx (MS)*	
MW4-S1-15 (A9I0002-04)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	**556**	---	171	mg/kg dry	2000	09/03/19 17:57	NWTPH-Gx (MS)	**F-13**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 107 %*		*Limits: 50-150 %*	*1*	*09/03/19 17:57*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*	*1*	*09/03/19 17:57*	*NWTPH-Gx (MS)*	
MW4-S2-39 (A9I0002-05)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	ND	---	3.66	mg/kg dry	50	09/03/19 15:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*		*Limits: 50-150 %*	*1*	*09/03/19 15:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*92 %*	*50-150 %*	*1*	*09/03/19 15:40*	*NWTPH-Gx (MS)*	
MW5-S1-9 (A9I0002-06)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	**23100**	---	281	mg/kg dry	2000	09/03/19 19:18	NWTPH-Gx (MS)	**F-13**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 346 %*		*Limits: 50-150 %*	*1*	*09/03/19 19:18*	*NWTPH-Gx (MS)*	*S-08*
1,4-Difluorobenzene (Sur)			*94 %*	*50-150 %*	*1*	*09/03/19 19:18*	*NWTPH-Gx (MS)*	
MW4-S3-34 (A9I0002-07)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	**673**	---	28.1	mg/kg dry	200	09/03/19 18:51	NWTPH-Gx (MS)	**F-13**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 170 %*		*Limits: 50-150 %*	*1*	*09/03/19 18:51*	*NWTPH-Gx (MS)*	*S-08*
1,4-Difluorobenzene (Sur)			*94 %*	*50-150 %*	*1*	*09/03/19 18:51*	*NWTPH-Gx (MS)*	
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090444**		
Gasoline Range Organics	**535**	---	5.70	mg/kg dry	50	09/03/19 16:08	NWTPH-Gx (MS)	**F-13**

Apex Laboratories

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090444**		
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*611 %*	*Limits: 50-150 %*	*1*	*09/03/19 16:08*	*NWTPH-Gx (MS)*	*S-08*
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*	*1*	*09/03/19 16:08*	*NWTPH-Gx (MS)*	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1-S1-26 (A9I0002-01)				**Matrix: Soil**		**Batch: 9090444**		
Acetone	ND	---	0.453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Acrylonitrile	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Benzene	ND	---	0.00453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Bromobenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Bromochloromethane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Bromodichloromethane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Bromoform	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Bromomethane	ND	---	0.227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
2-Butanone (MEK)	ND	---	0.227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
n-Butylbenzene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
sec-Butylbenzene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
tert-Butylbenzene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Carbon disulfide	ND	---	0.227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Carbon tetrachloride	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Chlorobenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Chloroethane	ND	---	0.227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Chloroform	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Chloromethane	ND	---	0.113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
2-Chlorotoluene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
4-Chlorotoluene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Dibromochloromethane	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Dibromomethane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1-S1-26 (A9I0002-01)				**Matrix: Soil**		**Batch: 9090444**		
Ethylbenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Hexachlorobutadiene	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
2-Hexanone	ND	---	0.227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Isopropylbenzene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
4-Isopropyltoluene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Methylene chloride	ND	---	0.113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	0.227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Naphthalene	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
n-Propylbenzene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Styrene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Tetrachloroethene (PCE)	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Toluene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Trichloroethene (TCE)	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Trichlorofluoromethane	ND	---	0.0453	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,2,4-Trimethylbenzene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
1,3,5-Trimethylbenzene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Vinyl chloride	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
m,p-Xylene	ND	---	0.0227	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
o-Xylene	ND	---	0.0113	mg/kg dry	50	09/03/19 14:19	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:* *80-120 %*	*1*	*09/03/19 14:19*	*5035A/8260C*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*09/03/19 14:19*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*09/03/19 14:19*	*5035A/8260C*	
MW2-S1-30 (A9I0002-02)				**Matrix: Soil**		**Batch: 9090444**		
Acetone	ND	---	0.623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Acrylonitrile	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Benzene	ND	---	0.00623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Bromobenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Bromochloromethane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Bromodichloromethane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW2-S1-30 (A9I0002-02)				**Matrix: Soil**		**Batch: 9090444**		
Bromoform	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Bromomethane	ND	---	0.312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
2-Butanone (MEK)	ND	---	0.312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
n-Butylbenzene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
sec-Butylbenzene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
tert-Butylbenzene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Carbon disulfide	ND	---	0.312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Carbon tetrachloride	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Chlorobenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Chloroethane	ND	---	0.312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Chloroform	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Chloromethane	ND	---	0.156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
2-Chlorotoluene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
4-Chlorotoluene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Dibromochloromethane	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Dibromomethane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Ethylbenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Hexachlorobutadiene	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
2-Hexanone	ND	---	0.312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Isopropylbenzene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
4-Isopropyltoluene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Methylene chloride	ND	---	0.156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW2-S1-30 (A9I0002-02)				**Matrix: Soil**		**Batch: 9090444**		
4-Methyl-2-pentanone (MiBK)	ND	---	0.312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Naphthalene	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
n-Propylbenzene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Styrene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Tetrachloroethene (PCE)	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Toluene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Trichloroethene (TCE)	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Trichlorofluoromethane	ND	---	0.0623	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,2,4-Trimethylbenzene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
1,3,5-Trimethylbenzene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Vinyl chloride	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
m,p-Xylene	ND	---	0.0312	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
o-Xylene	ND	---	0.0156	mg/kg dry	50	09/03/19 15:13	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*09/03/19 15:13*	*5035A/8260C*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*09/03/19 15:13*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*09/03/19 15:13*	*5035A/8260C*	
MW3-S1-36 (A9I0002-03RE1)				**Matrix: Soil**		**Batch: 9090488**		
Acetone	ND	---	0.612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Acrylonitrile	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Benzene	ND	---	0.00612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Bromobenzene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Bromochloromethane	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Bromodichloromethane	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Bromoform	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Bromomethane	ND	---	0.306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
2-Butanone (MEK)	ND	---	0.306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
n-Butylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
sec-Butylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
tert-Butylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW3-S1-36 (A9I0002-03RE1)				**Matrix: Soil**		**Batch: 9090488**		
Carbon disulfide	ND	---	0.306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Carbon tetrachloride	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Chlorobenzene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Chloroethane	ND	---	0.306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Chloroform	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Chloromethane	ND	---	0.153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
2-Chlorotoluene	ND	---	0.153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	R-02
4-Chlorotoluene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Dibromochloromethane	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Dibromomethane	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Ethylbenzene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Hexachlorobutadiene	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
2-Hexanone	ND	---	0.306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Isopropylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
4-Isopropyltoluene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Methylene chloride	ND	---	0.153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	0.306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Naphthalene	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
n-Propylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	R-02
Styrene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	

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Kevin J. Friscia, Project Manager

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW3-S1-36 (A9I0002-03RE1)				**Matrix: Soil**		**Batch: 9090488**		
1,1,2,2-Tetrachloroethane	ND	---	1.53	mg/kg dry	50	09/04/19 19:10	5035A/8260C	R-02
Tetrachloroethene (PCE)	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Toluene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Trichloroethene (TCE)	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Trichlorofluoromethane	ND	---	0.0612	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,2,4-Trimethylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
1,3,5-Trimethylbenzene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Vinyl chloride	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
m,p-Xylene	ND	---	0.0306	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
o-Xylene	ND	---	0.0153	mg/kg dry	50	09/04/19 19:10	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*109 %*	*Limits: 80-120 %*	*1*	*09/04/19 19:10*	*5035A/8260C*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*09/04/19 19:10*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*09/04/19 19:10*	*5035A/8260C*	
MW4-S1-15 (A9I0002-04)				**Matrix: Soil**		**Batch: 9090444**		
1,2,4-Trimethylbenzene	**32.0**	---	1.71	mg/kg dry	2000	09/03/19 17:57	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits: 80-120 %*	*1*	*09/03/19 17:57*	*5035A/8260C*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*09/03/19 17:57*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*09/03/19 17:57*	*5035A/8260C*	
MW4-S1-15 (A9I0002-04RE1)				**Matrix: Soil**		**Batch: 9090488**		
Acetone	ND	---	1.71	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Acrylonitrile	ND	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Benzene	ND	---	0.0171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Bromobenzene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Bromochloromethane	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Bromodichloromethane	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Bromoform	ND	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Bromomethane	ND	---	0.853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
2-Butanone (MEK)	ND	---	0.853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
n-Butylbenzene	**1.77**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
sec-Butylbenzene	**2.54**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
tert-Butylbenzene	**0.154**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	**M-02**

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4-S1-15 (A9I0002-04RE1)				**Matrix: Soil**		**Batch: 9090488**		
Carbon disulfide	ND	---	0.853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Carbon tetrachloride	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Chlorobenzene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Chloroethane	ND	---	0.853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Chloroform	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Chloromethane	ND	---	0.426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
2-Chlorotoluene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
4-Chlorotoluene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Dibromochloromethane	ND	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Dibromomethane	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Ethylbenzene	**0.579**	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Hexachlorobutadiene	ND	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
2-Hexanone	ND	---	0.853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Isopropylbenzene	**1.40**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
4-Isopropyltoluene	**2.45**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	**M-02**
Methylene chloride	ND	---	0.426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	0.853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Naphthalene	**0.433**	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
n-Propylbenzene	**4.16**	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Styrene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4-S1-15 (A9I0002-04RE1)				**Matrix: Soil**		**Batch: 9090488**		
1,1,2,2-Tetrachloroethane	ND	---	0.341	mg/kg dry	100	09/04/19 20:04	5035A/8260C	R-02
Tetrachloroethene (PCE)	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Toluene	ND	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Trichloroethene (TCE)	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Trichlorofluoromethane	ND	---	0.171	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.597	mg/kg dry	100	09/04/19 20:04	5035A/8260C	R-02
1,3,5-Trimethylbenzene	**7.68**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
Vinyl chloride	ND	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
m,p-Xylene	**0.644**	---	0.0853	mg/kg dry	100	09/04/19 20:04	5035A/8260C	
o-Xylene	**0.0492**	---	0.0426	mg/kg dry	100	09/04/19 20:04	5035A/8260C	**M-02**
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*09/04/19 20:04*	*5035A/8260C*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*09/04/19 20:04*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*09/04/19 20:04*	*5035A/8260C*	
MW4-S2-39 (A9I0002-05)				**Matrix: Soil**		**Batch: 9090444**		
Acetone	ND	---	0.732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Acrylonitrile	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Benzene	ND	---	0.00732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Bromobenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Bromochloromethane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Bromodichloromethane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Bromoform	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Bromomethane	ND	---	0.366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
2-Butanone (MEK)	ND	---	0.366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
n-Butylbenzene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
sec-Butylbenzene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
tert-Butylbenzene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Carbon disulfide	ND	---	0.366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Carbon tetrachloride	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Chlorobenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Chloroethane	ND	---	0.366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Chloroform	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Chloromethane	ND	---	0.183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
2-Chlorotoluene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4-S2-39 (A9I0002-05)				**Matrix: Soil**		**Batch: 9090444**		
4-Chlorotoluene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Dibromochloromethane	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Dibromomethane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Ethylbenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Hexachlorobutadiene	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
2-Hexanone	ND	---	0.366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Isopropylbenzene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
4-Isopropyltoluene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Methylene chloride	ND	---	0.183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	0.366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Naphthalene	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
n-Propylbenzene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Styrene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Tetrachloroethene (PCE)	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Toluene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4-S2-39 (A9I0002-05)				**Matrix: Soil**		**Batch: 9090444**		
Trichloroethene (TCE)	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Trichlorofluoromethane	ND	---	0.0732	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,2,4-Trimethylbenzene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
1,3,5-Trimethylbenzene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Vinyl chloride	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
m,p-Xylene	ND	---	0.0366	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
o-Xylene	ND	---	0.0183	mg/kg dry	50	09/03/19 15:40	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*09/03/19 15:40*	*5035A/8260C*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*09/03/19 15:40*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*09/03/19 15:40*	*5035A/8260C*	
MW5-S1-9 (A9I0002-06)				**Matrix: Soil**		**Batch: 9090444**		
Acetone	ND	---	56.3	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Acrylonitrile	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Benzene	ND	---	0.563	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Bromobenzene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Bromochloromethane	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Bromodichloromethane	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Bromoform	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Bromomethane	ND	---	28.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
2-Butanone (MEK)	ND	---	28.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
n-Butylbenzene	**25.9**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	**M-02**
sec-Butylbenzene	**43.4**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
tert-Butylbenzene	**3.54**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	**M-02**
Carbon disulfide	ND	---	28.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Carbon tetrachloride	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Chlorobenzene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Chloroethane	ND	---	28.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Chloroform	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Chloromethane	ND	---	14.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
2-Chlorotoluene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
4-Chlorotoluene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Dibromochloromethane	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	14.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Dibromomethane	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2-Dichlorobenzene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5-S1-9 (A9I0002-06)				**Matrix: Soil**		**Batch: 9090444**		
1,3-Dichlorobenzene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,4-Dichlorobenzene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Dichlorodifluoromethane	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1-Dichloroethane	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1-Dichloroethene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2-Dichloropropane	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,3-Dichloropropane	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
2,2-Dichloropropane	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1-Dichloropropene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Ethylbenzene	**3.19**	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Hexachlorobutadiene	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
2-Hexanone	ND	---	28.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Isopropylbenzene	**13.2**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
4-Isopropyltoluene	**43.6**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	**M-02**
Methylene chloride	ND	---	14.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	28.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Naphthalene	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
n-Propylbenzene	**43.7**	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Styrene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	R-02
Tetrachloroethene (PCE)	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Toluene	ND	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	14.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	14.1	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1,1-Trichloroethane	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,1,2-Trichloroethane	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Trichloroethene (TCE)	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Trichlorofluoromethane	ND	---	5.63	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,2,3-Trichloropropane	ND	---	25.3	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	R-02
1,2,4-Trimethylbenzene	**479**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
1,3,5-Trimethylbenzene	**147**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Vinyl chloride	ND	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5-S1-9 (A9I0002-06)				**Matrix: Soil**		**Batch: 9090444**		
m,p-Xylene	**7.81**	---	2.81	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
o-Xylene	**7.87**	---	1.41	mg/kg dry	2000	09/03/19 19:18	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*09/03/19 19:18*	*5035A/8260C*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*09/03/19 19:18*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*09/03/19 19:18*	*5035A/8260C*	
MW4-S3-34 (A9I0002-07RE1)				**Matrix: Soil**		**Batch: 9090488**		
Acetone	ND	---	1.40	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Acrylonitrile	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Benzene	ND	---	0.0140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Bromobenzene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Bromochloromethane	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Bromodichloromethane	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Bromoform	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Bromomethane	ND	---	0.702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
2-Butanone (MEK)	ND	---	0.702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
n-Butylbenzene	**0.232**	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
sec-Butylbenzene	**0.365**	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
tert-Butylbenzene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Carbon disulfide	ND	---	0.702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Carbon tetrachloride	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Chlorobenzene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Chloroethane	ND	---	0.702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Chloroform	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Chloromethane	ND	---	0.351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
2-Chlorotoluene	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	R-02
4-Chlorotoluene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Dibromochloromethane	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Dibromomethane	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	

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Kevin J. Friscia, Project Manager

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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4-S3-34 (A9I0002-07RE1)				**Matrix: Soil**		**Batch: 9090488**		
cis-1,2-Dichloroethene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Ethylbenzene	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Hexachlorobutadiene	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
2-Hexanone	ND	---	0.702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Isopropylbenzene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
4-Isopropyltoluene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Methylene chloride	ND	---	0.351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	0.702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Naphthalene	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
n-Propylbenzene	**0.233**	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Styrene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	---	1.05	mg/kg dry	50	09/04/19 19:37	5035A/8260C	R-02
Tetrachloroethene (PCE)	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Toluene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Trichloroethene (TCE)	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Trichlorofluoromethane	ND	---	0.140	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,2,4-Trimethylbenzene	**0.110**	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
1,3,5-Trimethylbenzene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
Vinyl chloride	ND	---	0.0351	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
m,p-Xylene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	
o-Xylene	ND	---	0.0702	mg/kg dry	50	09/04/19 19:37	5035A/8260C	R-02
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 109 %*		*Limits: 80-120 %*	*1*	*09/04/19 19:37*	*5035A/8260C*	
Toluene-d8 (Surr)			*94 %*	*80-120 %*	*1*	*09/04/19 19:37*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*105 %*	*80-120 %*	*1*	*09/04/19 19:37*	*5035A/8260C*	

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090444**		
Acetone	ND	---	1.14	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Acrylonitrile	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Benzene	ND	---	0.0114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Bromobenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Bromochloromethane	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Bromodichloromethane	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Bromoform	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Bromomethane	ND	---	0.570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
2-Butanone (MEK)	ND	---	0.570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
n-Butylbenzene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
sec-Butylbenzene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
tert-Butylbenzene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Carbon disulfide	ND	---	0.570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Carbon tetrachloride	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Chlorobenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Chloroethane	ND	---	0.570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Chloroform	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Chloromethane	ND	---	0.285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
2-Chlorotoluene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
4-Chlorotoluene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Dibromochloromethane	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	---	0.285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Dibromomethane	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2-Dichlorobenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,3-Dichlorobenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,4-Dichlorobenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Dichlorodifluoromethane	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1-Dichloroethane	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1-Dichloroethene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
cis-1,2-Dichloroethene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
trans-1,2-Dichloroethene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2-Dichloropropane	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,3-Dichloropropane	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
2,2-Dichloropropane	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1-Dichloropropene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
cis-1,3-Dichloropropene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
trans-1,3-Dichloropropene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	

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Kevin J. Friscia, Project Manager

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090444**		
Ethylbenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Hexachlorobutadiene	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
2-Hexanone	ND	---	0.570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Isopropylbenzene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
4-Isopropyltoluene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Methylene chloride	ND	---	0.285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	0.570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Naphthalene	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
n-Propylbenzene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Styrene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	R-02
Tetrachloroethene (PCE)	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Toluene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2,3-Trichlorobenzene	ND	---	0.285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2,4-Trichlorobenzene	ND	---	0.285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1,1-Trichloroethane	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,1,2-Trichloroethane	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Trichloroethene (TCE)	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Trichlorofluoromethane	ND	---	0.114	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2,3-Trichloropropane	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,2,4-Trimethylbenzene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
1,3,5-Trimethylbenzene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Vinyl chloride	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
m,p-Xylene	ND	---	0.0570	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
o-Xylene	ND	---	0.0285	mg/kg dry	50	09/03/19 16:08	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*	*1*	*09/03/19 16:08*	*5035A/8260C*	
Toluene-d8 (Surr)			*103 %*		*80-120 %*	*1*	*09/03/19 16:08*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*	*1*	*09/03/19 16:08*	*5035A/8260C*	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1-S1-26 (A9I0002-01)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**89.1**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW2-S1-30 (A9I0002-02)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**82.1**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW3-S1-36 (A9I0002-03)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**85.4**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW4-S1-15 (A9I0002-04)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**75.2**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW4-S2-39 (A9I0002-05)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**88.8**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW5-S1-9 (A9I0002-06)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**75.4**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW4-S3-34 (A9I0002-07)				**Matrix: Soil**		**Batch: 9090468**		
% Solids	**94.7**	---	1.00	% by Weight	1	09/05/19 08:22	EPA 8000C	
MW5-S2-31 (A9I0002-08)				**Matrix: Soil**		**Batch: 9090496**		
% Solids	**85.0**	---	1.00	% by Weight	1	09/04/19 15:27	EPA 8000C	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090729 - EPA 3546 (Fuels)							Soil					
Blank (9090729-BLK1)		Prepared: 09/11/19 12:56 Analyzed: 09/11/19 20:56										
NWTPH-Dx												
Diesel	ND	---	16.7	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	33.3	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	---	33.3	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 93 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (9090729-BS1)		Prepared: 09/11/19 12:56 Analyzed: 09/11/19 21:17										
NWTPH-Dx												
Diesel	111	---	20.0	mg/kg wet	1	125	---	89	76 - 115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 95 %*		*Limits: 50-150 %*			*Dilution: 1x*					
Duplicate (9090729-DUP1)		Prepared: 09/11/19 12:56 Analyzed: 09/11/19 21:58										
QC Source Sample: MW1-S1-26 (A9I0002-01)												
NWTPH-Dx												
Diesel	ND	---	21.3	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	42.6	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	---	42.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 92 %*		*Limits: 50-150 %*			*Dilution: 1x*					

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Blank (9090444-BLK1)		Prepared: 09/03/19 11:00		Analyzed: 09/03/19 13:47								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*96 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*92 %*		*50-150 %*			*"*				
LCS (9090444-BS2)		Prepared: 09/03/19 11:00		Analyzed: 09/03/19 13:20								
NWTPH-Gx (MS)												
Gasoline Range Organics	24.2	---	5.00	mg/kg wet	50	25.0	---	97	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*95 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*95 %*		*50-150 %*			*"*				
Duplicate (9090444-DUP1)		Prepared: 08/28/19 10:04		Analyzed: 09/03/19 14:46								
QC Source Sample: MW1-S1-26 (A9I0002-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	2.05	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*108 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*96 %*		*50-150 %*			*"*				

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Blank (9090444-BLK1)		Prepared: 09/03/19 11:00 Analyzed: 09/03/19 13:47										
5035A/8260C												
Acetone	ND	---	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Kevin J. Friscia, Project Manager

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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Blank (9090444-BLK1)		Prepared: 09/03/19 11:00		Analyzed: 09/03/19 13:47								
1,2-Dichloropropane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 103 %*		*Limits: 80-120 %*					*Dilution: 1x*			

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A									Soil			
Blank (9090444-BLK1)			Prepared: 09/03/19 11:00 Analyzed: 09/03/19 13:47									
Surr: Toluene-d8 (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*				*"*				
LCS (9090444-BS1)			Prepared: 09/03/19 11:00 Analyzed: 09/03/19 12:53									
5035A/8260C												
Acetone	2.12	---	1.00	mg/kg wet	50	2.00	---	106	80 - 120%	---	---	
Acrylonitrile	0.987	---	0.100	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Benzene	1.00	---	0.0100	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Bromobenzene	0.971	---	0.0250	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Bromochloromethane	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Bromodichloromethane	0.985	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Bromoform	0.974	---	0.100	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Bromomethane	1.21	---	0.500	mg/kg wet	50	1.00	---	**121**	**80 - 120%**	---	---	Q-56
2-Butanone (MEK)	2.18	---	0.500	mg/kg wet	50	2.00	---	109	80 - 120%	---	---	
n-Butylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
sec-Butylbenzene	0.932	---	0.0500	mg/kg wet	50	1.00	---	93	80 - 120%	---	---	
tert-Butylbenzene	0.937	---	0.0500	mg/kg wet	50	1.00	---	94	80 - 120%	---	---	
Carbon disulfide	0.914	---	0.500	mg/kg wet	50	1.00	---	91	80 - 120%	---	---	
Carbon tetrachloride	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
Chlorobenzene	0.959	---	0.0250	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
Chloroethane	1.08	---	0.500	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
Chloroform	0.977	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Chloromethane	1.06	---	0.250	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
2-Chlorotoluene	0.961	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
4-Chlorotoluene	0.941	---	0.0500	mg/kg wet	50	1.00	---	94	80 - 120%	---	---	
Dibromochloromethane	1.04	---	0.100	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	0.950	---	0.250	mg/kg wet	50	1.00	---	95	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80 - 120%	---	---	
Dibromomethane	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80 - 120%	---	---	
1,2-Dichlorobenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
1,3-Dichlorobenzene	0.995	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
1,4-Dichlorobenzene	0.987	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Dichlorodifluoromethane	1.35	---	0.100	mg/kg wet	50	1.00	---	**135**	**80 - 120%**	---	---	E-05, Q-56
1,1-Dichloroethane	0.988	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
LCS (9090444-BS1)		Prepared: 09/03/19 11:00		Analyzed: 09/03/19 12:53								
1,2-Dichloroethane (EDC)	1.08	---	0.0250	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
1,1-Dichloroethene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
cis-1,2-Dichloroethene	1.07	---	0.0250	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
trans-1,2-Dichloroethene	1.08	---	0.0250	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
1,2-Dichloropropane	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
1,3-Dichloropropane	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
2,2-Dichloropropane	1.16	---	0.0500	mg/kg wet	50	1.00	---	116	80 - 120%	---	---	
1,1-Dichloropropene	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80 - 120%	---	---	
cis-1,3-Dichloropropene	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
trans-1,3-Dichloropropene	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
Ethylbenzene	0.935	---	0.0250	mg/kg wet	50	1.00	---	94	80 - 120%	---	---	
Hexachlorobutadiene	1.01	---	0.100	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
2-Hexanone	2.08	---	0.500	mg/kg wet	50	2.00	---	104	80 - 120%	---	---	
Isopropylbenzene	0.942	---	0.0500	mg/kg wet	50	1.00	---	94	80 - 120%	---	---	
4-Isopropyltoluene	0.968	---	0.0500	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Methylene chloride	0.960	---	0.250	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.08	---	0.500	mg/kg wet	50	2.00	---	104	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Naphthalene	1.07	---	0.100	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
n-Propylbenzene	0.966	---	0.0250	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Styrene	0.956	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	1.00	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
1,1,2,2-Tetrachloroethane	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Tetrachloroethene (PCE)	1.07	---	0.0250	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
Toluene	0.963	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
1,2,3-Trichlorobenzene	1.04	---	0.250	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
1,2,4-Trichlorobenzene	1.05	---	0.250	mg/kg wet	50	1.00	---	105	80 - 120%	---	---	
1,1,1-Trichloroethane	0.987	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
1,1,2-Trichloroethane	1.00	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Trichloroethene (TCE)	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
Trichlorofluoromethane	1.19	---	0.100	mg/kg wet	50	1.00	---	119	80 - 120%	---	---	
1,2,3-Trichloropropane	1.08	---	0.0500	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
1,2,4-Trimethylbenzene	0.947	---	0.0500	mg/kg wet	50	1.00	---	95	80 - 120%	---	---	
1,3,5-Trimethylbenzene	0.916	---	0.0500	mg/kg wet	50	1.00	---	92	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
LCS (9090444-BS1)		Prepared: 09/03/19 11:00		Analyzed: 09/03/19 12:53								
Vinyl chloride	1.13	---	0.0250	mg/kg wet	50	1.00	---	113	80 - 120%	---	---	
m,p-Xylene	1.93	---	0.0500	mg/kg wet	50	2.00	---	97	80 - 120%	---	---	
o-Xylene	0.919	---	0.0250	mg/kg wet	50	1.00	---	92	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
Duplicate (9090444-DUP1)		Prepared: 08/28/19 10:04		Analyzed: 09/03/19 14:46								
QC Source Sample: MW1-S1-26 (A9I0002-01)												
5035A/8260C												
Acetone	ND	---	0.410	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	0.00410	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	0.205	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	0.205	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	0.205	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	0.205	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	0.103	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	0.103	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Duplicate (9090444-DUP1)		Prepared: 08/28/19 10:04 Analyzed: 09/03/19 14:46										
QC Source Sample: MW1-S1-26 (A9I0002-01)												
1,2-Dichlorobenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	0.205	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	0.103	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	0.205	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	0.103	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	0.103	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Duplicate (9090444-DUP1)		Prepared: 08/28/19 10:04 Analyzed: 09/03/19 14:46										
QC Source Sample: MW1-S1-26 (A9I0002-01)												
1,1,2-Trichloroethane	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	0.0410	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	0.0205	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	0.0103	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 107 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*97 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*103 %*		*80-120 %*			*"*					
Matrix Spike (9090444-MS1)		Prepared: 08/29/19 15:15 Analyzed: 09/03/19 16:35										
QC Source Sample: MW5-S2-31 (A9I0002-08)												
5035A/8260C												
Acetone	2.62	---	1.14	mg/kg dry	50	2.28	ND	115	36 - 164%	---	---	
Acrylonitrile	1.18	---	0.114	mg/kg dry	50	1.14	ND	104	65 - 134%	---	---	
Benzene	1.24	---	0.0114	mg/kg dry	50	1.14	ND	109	77 - 121%	---	---	
Bromobenzene	1.19	---	0.0285	mg/kg dry	50	1.14	ND	104	78 - 121%	---	---	
Bromochloromethane	1.27	---	0.0570	mg/kg dry	50	1.14	ND	112	78 - 125%	---	---	
Bromodichloromethane	1.11	---	0.0570	mg/kg dry	50	1.14	ND	97	75 - 127%	---	---	
Bromoform	1.12	---	0.114	mg/kg dry	50	1.14	ND	98	67 - 132%	---	---	
Bromomethane	1.57	---	0.570	mg/kg dry	50	1.14	ND	138	53 - 143%	---	---	Q-54
2-Butanone (MEK)	2.61	---	0.570	mg/kg dry	50	2.28	ND	114	51 - 148%	---	---	
n-Butylbenzene	1.16	---	0.0570	mg/kg dry	50	1.14	ND	102	70 - 128%	---	---	
sec-Butylbenzene	1.11	---	0.0570	mg/kg dry	50	1.14	ND	97	73 - 126%	---	---	
tert-Butylbenzene	1.18	---	0.0570	mg/kg dry	50	1.14	ND	104	73 - 125%	---	---	
Carbon disulfide	1.18	---	0.570	mg/kg dry	50	1.14	ND	104	63 - 132%	---	---	
Carbon tetrachloride	1.25	---	0.0570	mg/kg dry	50	1.14	ND	110	70 - 135%	---	---	
Chlorobenzene	1.19	---	0.0285	mg/kg dry	50	1.14	ND	103	79 - 120%	---	---	
Chloroethane	1.53	---	0.570	mg/kg dry	50	1.14	ND	134	59 - 139%	---	---	
Chloroform	1.20	---	0.0570	mg/kg dry	50	1.14	ND	105	78 - 123%	---	---	

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Matrix Spike (9090444-MS1)		Prepared: 08/29/19 15:15		Analyzed: 09/03/19 16:35								
QC Source Sample: MW5-S2-31 (A9I0002-08)												
Chloromethane	1.39	---	0.285	mg/kg dry	50	1.14	ND	122	50 - 136%	---	---	
2-Chlorotoluene	1.63	---	0.0570	mg/kg dry	50	1.14	ND	**140**	**75 - 122%**	---	---	Q-02
4-Chlorotoluene	1.17	---	0.0570	mg/kg dry	50	1.14	ND	103	72 - 124%	---	---	
Dibromochloromethane	1.12	---	0.114	mg/kg dry	50	1.14	ND	98	74 - 126%	---	---	
1,2-Dibromo-3-chloropropane	0.971	---	0.285	mg/kg dry	50	1.14	ND	85	61 - 132%	---	---	
1,2-Dibromoethane (EDB)	1.21	---	0.0570	mg/kg dry	50	1.14	ND	106	78 - 122%	---	---	
Dibromomethane	1.24	---	0.0570	mg/kg dry	50	1.14	ND	109	78 - 125%	---	---	
1,2-Dichlorobenzene	1.20	---	0.0285	mg/kg dry	50	1.14	ND	105	78 - 121%	---	---	
1,3-Dichlorobenzene	1.19	---	0.0285	mg/kg dry	50	1.14	ND	104	77 - 121%	---	---	
1,4-Dichlorobenzene	1.15	---	0.0285	mg/kg dry	50	1.14	ND	101	75 - 120%	---	---	
Dichlorodifluoromethane	1.82	---	0.114	mg/kg dry	50	1.14	ND	**159**	**29 - 149%**	---	---	E-05, Q-54a
1,1-Dichloroethane	1.33	---	0.0285	mg/kg dry	50	1.14	ND	116	76 - 125%	---	---	
1,2-Dichloroethane (EDC)	1.28	---	0.0285	mg/kg dry	50	1.14	ND	113	73 - 128%	---	---	
1,1-Dichloroethene	1.34	---	0.0285	mg/kg dry	50	1.14	ND	118	70 - 131%	---	---	
cis-1,2-Dichloroethene	1.35	---	0.0285	mg/kg dry	50	1.14	ND	118	77 - 123%	---	---	
trans-1,2-Dichloroethene	1.36	---	0.0285	mg/kg dry	50	1.14	ND	120	74 - 125%	---	---	
1,2-Dichloropropane	1.23	---	0.0285	mg/kg dry	50	1.14	ND	108	76 - 123%	---	---	
1,3-Dichloropropane	1.22	---	0.0570	mg/kg dry	50	1.14	ND	107	77 - 121%	---	---	
2,2-Dichloropropane	1.37	---	0.0570	mg/kg dry	50	1.14	ND	121	67 - 133%	---	---	
1,1-Dichloropropene	1.32	---	0.0570	mg/kg dry	50	1.14	ND	116	76 - 125%	---	---	
cis-1,3-Dichloropropene	1.20	---	0.0570	mg/kg dry	50	1.14	ND	105	74 - 126%	---	---	
trans-1,3-Dichloropropene	1.14	---	0.0570	mg/kg dry	50	1.14	ND	100	71 - 130%	---	---	
Ethylbenzene	1.15	---	0.0285	mg/kg dry	50	1.14	ND	101	76 - 122%	---	---	
Hexachlorobutadiene	1.43	---	0.114	mg/kg dry	50	1.14	ND	125	61 - 135%	---	---	
2-Hexanone	2.53	---	0.570	mg/kg dry	50	2.28	ND	111	53 - 145%	---	---	
Isopropylbenzene	1.24	---	0.0570	mg/kg dry	50	1.14	ND	108	68 - 134%	---	---	
4-Isopropyltoluene	1.14	---	0.0570	mg/kg dry	50	1.14	ND	100	73 - 127%	---	---	
Methylene chloride	1.24	---	0.285	mg/kg dry	50	1.14	ND	109	70 - 128%	---	---	
4-Methyl-2-pentanone (MiBK)	2.50	---	0.570	mg/kg dry	50	2.28	ND	109	65 - 135%	---	---	
Methyl tert-butyl ether (MTBE)	1.21	---	0.0570	mg/kg dry	50	1.14	ND	106	73 - 125%	---	---	
Naphthalene	1.25	---	0.114	mg/kg dry	50	1.14	ND	109	62 - 129%	---	---	
n-Propylbenzene	1.19	---	0.0285	mg/kg dry	50	1.14	ND	105	73 - 125%	---	---	
Styrene	1.29	---	0.0570	mg/kg dry	50	1.14	ND	113	76 - 124%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090444 - EPA 5035A							**Soil**					
Matrix Spike (9090444-MS1)		Prepared: 08/29/19 15:15		Analyzed: 09/03/19 16:35								
QC Source Sample: MW5-S2-31 (A9I0002-08)												
1,1,1,2-Tetrachloroethane	1.08	---	0.0285	mg/kg dry	50	1.14	ND	94	78 - 125%	---	---	
1,1,2,2-Tetrachloroethane	6.65	---	0.0570	mg/kg dry	50	1.14	ND	**561**	**70 - 124%**	---	---	Q-02
Tetrachloroethene (PCE)	1.31	---	0.0285	mg/kg dry	50	1.14	ND	115	73 - 128%	---	---	
Toluene	1.18	---	0.0570	mg/kg dry	50	1.14	ND	104	77 - 121%	---	---	
1,2,3-Trichlorobenzene	1.21	---	0.285	mg/kg dry	50	1.14	ND	106	66 - 130%	---	---	
1,2,4-Trichlorobenzene	1.22	---	0.285	mg/kg dry	50	1.14	ND	107	67 - 129%	---	---	
1,1,1-Trichloroethane	1.23	---	0.0285	mg/kg dry	50	1.14	ND	108	73 - 130%	---	---	
1,1,2-Trichloroethane	1.15	---	0.0285	mg/kg dry	50	1.14	ND	101	78 - 121%	---	---	
Trichloroethene (TCE)	1.30	---	0.0285	mg/kg dry	50	1.14	ND	114	77 - 123%	---	---	
Trichlorofluoromethane	1.58	---	0.114	mg/kg dry	50	1.14	ND	139	62 - 140%	---	---	
1,2,3-Trichloropropane	1.88	---	0.0570	mg/kg dry	50	1.14	ND	**165**	**73 - 125%**	---	---	Q-02
1,2,4-Trimethylbenzene	1.11	---	0.0570	mg/kg dry	50	1.14	ND	97	75 - 123%	---	---	
1,3,5-Trimethylbenzene	1.06	---	0.0570	mg/kg dry	50	1.14	ND	93	73 - 124%	---	---	
Vinyl chloride	1.50	---	0.0285	mg/kg dry	50	1.14	ND	132	56 - 135%	---	---	
m,p-Xylene	2.45	---	0.0570	mg/kg dry	50	2.28	ND	107	77 - 124%	---	---	
o-Xylene	1.29	---	0.0285	mg/kg dry	50	1.14	ND	111	77 - 123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090488 - EPA 5035A							**Soil**					
Blank (9090488-BLK1)		Prepared: 09/04/19 13:00 Analyzed: 09/04/19 14:09										
5035A/8260C												
Acetone	ND	---	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090488 - EPA 5035A							**Soil**					
Blank (9090488-BLK1)		Prepared: 09/04/19 13:00		Analyzed: 09/04/19 14:09								
1,2-Dichloropropane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 103 %*		*Limits: 80-120 %*					*Dilution: 1x*			

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090488 - EPA 5035A									Soil			
Blank (9090488-BLK1)			Prepared: 09/04/19 13:00 Analyzed: 09/04/19 14:09									
Surr: Toluene-d8 (Surr)			*Recovery: 100 %*	*Limits: 80-120 %*					*Dilution: 1x*			
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*					*"*			
LCS (9090488-BS1)			Prepared: 09/04/19 13:00 Analyzed: 09/04/19 13:15									
5035A/8260C												
Acetone	2.12	---	1.00	mg/kg wet	50	2.00	---	106	80 - 120%	---	---	
Acrylonitrile	0.991	---	0.100	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Benzene	1.04	---	0.0100	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
Bromobenzene	0.999	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Bromochloromethane	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
Bromodichloromethane	0.904	---	0.0500	mg/kg wet	50	1.00	---	90	80 - 120%	---	---	
Bromoform	0.859	---	0.100	mg/kg wet	50	1.00	---	86	80 - 120%	---	---	
Bromomethane	1.23	---	0.500	mg/kg wet	50	1.00	---	**123**	**80 - 120%**	---	---	Q-56
2-Butanone (MEK)	2.14	---	0.500	mg/kg wet	50	2.00	---	107	80 - 120%	---	---	
n-Butylbenzene	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
sec-Butylbenzene	0.960	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
tert-Butylbenzene	0.957	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
Carbon disulfide	0.928	---	0.500	mg/kg wet	50	1.00	---	93	80 - 120%	---	---	
Carbon tetrachloride	0.993	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Chlorobenzene	0.982	---	0.0250	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Chloroethane	1.07	---	0.500	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
Chloroform	0.991	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Chloromethane	1.14	---	0.250	mg/kg wet	50	1.00	---	114	80 - 120%	---	---	
2-Chlorotoluene	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
4-Chlorotoluene	0.971	---	0.0500	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Dibromochloromethane	0.900	---	0.100	mg/kg wet	50	1.00	---	90	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	0.846	---	0.250	mg/kg wet	50	1.00	---	85	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Dibromomethane	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
1,2-Dichlorobenzene	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
1,3-Dichlorobenzene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
1,4-Dichlorobenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Dichlorodifluoromethane	1.44	---	0.100	mg/kg wet	50	1.00	---	**144**	**80 - 120%**	---	---	E-05, Q-56
1,1-Dichloroethane	0.989	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090488 - EPA 5035A							**Soil**					
LCS (9090488-BS1)		Prepared: 09/04/19 13:00		Analyzed: 09/04/19 13:15								
1,2-Dichloroethane (EDC)	1.08	---	0.0250	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
1,1-Dichloroethene	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
cis-1,2-Dichloroethene	1.07	---	0.0250	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
trans-1,2-Dichloroethene	1.13	---	0.0250	mg/kg wet	50	1.00	---	113	80 - 120%	---	---	
1,2-Dichloropropane	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
1,3-Dichloropropane	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
2,2-Dichloropropane	1.20	---	0.0500	mg/kg wet	50	1.00	---	120	80 - 120%	---	---	
1,1-Dichloropropene	1.09	---	0.0500	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
cis-1,3-Dichloropropene	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
trans-1,3-Dichloropropene	0.982	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Ethylbenzene	0.972	---	0.0250	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Hexachlorobutadiene	1.01	---	0.100	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
2-Hexanone	2.02	---	0.500	mg/kg wet	50	2.00	---	101	80 - 120%	---	---	
Isopropylbenzene	0.976	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
4-Isopropyltoluene	0.986	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Methylene chloride	1.06	---	0.250	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.04	---	0.500	mg/kg wet	50	2.00	---	102	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Naphthalene	1.08	---	0.100	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
n-Propylbenzene	0.999	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Styrene	0.980	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	0.932	---	0.0250	mg/kg wet	50	1.00	---	93	80 - 120%	---	---	
1,1,2,2-Tetrachloroethane	0.939	---	0.0500	mg/kg wet	50	1.00	---	94	80 - 120%	---	---	
Tetrachloroethene (PCE)	1.10	---	0.0250	mg/kg wet	50	1.00	---	110	80 - 120%	---	---	
Toluene	0.975	---	0.0500	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
1,2,3-Trichlorobenzene	1.05	---	0.250	mg/kg wet	50	1.00	---	105	80 - 120%	---	---	
1,2,4-Trichlorobenzene	1.07	---	0.250	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
1,1,1-Trichloroethane	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
1,1,2-Trichloroethane	0.984	---	0.0250	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Trichloroethene (TCE)	1.08	---	0.0250	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
Trichlorofluoromethane	1.18	---	0.100	mg/kg wet	50	1.00	---	118	80 - 120%	---	---	
1,2,3-Trichloropropane	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
1,2,4-Trimethylbenzene	0.963	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
1,3,5-Trimethylbenzene	0.932	---	0.0500	mg/kg wet	50	1.00	---	93	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090488 - EPA 5035A												**Soil**
LCS (9090488-BS1)		Prepared: 09/04/19 13:00 Analyzed: 09/04/19 13:15										
Vinyl chloride	1.20	---	0.0250	mg/kg wet	50	1.00	---	120	80 - 120%	---	---	
m,p-Xylene	1.99	---	0.0500	mg/kg wet	50	2.00	---	100	80 - 120%	---	---	
o-Xylene	0.952	---	0.0250	mg/kg wet	50	1.00	---	95	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*99 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*98 %*		*80-120 %*			*"*					

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090468 - Total Solids (Dry Weight)							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9090496 - Total Solids (Dry Weight)								Soil				
Duplicate (9090496-DUP1)		Prepared: 09/04/19 14:06		Analyzed: 09/04/19 15:27								
QC Source Sample: MW5-S2-31 (A9I0002-08)												
EPA 8000C												
% Solids	**87.7**	---	1.00	% by Weight	1	---	85.0	---	---	3	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9090729							
A9I0002-01	Soil	NWTPH-Dx	08/28/19 10:04	09/11/19 12:59	10.86g/5mL	10g/5mL	0.92
A9I0002-02	Soil	NWTPH-Dx	08/28/19 14:30	09/11/19 12:59	10.46g/5mL	10g/5mL	0.96
A9I0002-03	Soil	NWTPH-Dx	08/29/19 09:40	09/11/19 12:59	10.36g/5mL	10g/5mL	0.97
A9I0002-04RE1	Soil	NWTPH-Dx	08/29/19 12:10	09/11/19 12:59	10.37g/5mL	10g/5mL	0.96
A9I0002-05	Soil	NWTPH-Dx	08/29/19 12:45	09/11/19 12:59	11.19g/5mL	10g/5mL	0.89
A9I0002-06	Soil	NWTPH-Dx	08/29/19 13:45	09/11/19 12:59	10.49g/5mL	10g/5mL	0.95
A9I0002-07	Soil	NWTPH-Dx	08/29/19 13:00	09/11/19 12:59	10.89g/5mL	10g/5mL	0.92
A9I0002-08	Soil	NWTPH-Dx	08/29/19 15:15	09/11/19 12:59	10.68g/5mL	10g/5mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9090444							
A9I0002-01	Soil	NWTPH-Gx (MS)	08/28/19 10:04	08/28/19 10:04	16.98g/5mL	5g/5mL	0.29
A9I0002-02	Soil	NWTPH-Gx (MS)	08/28/19 14:30	08/28/19 14:30	15.03g/5mL	5g/5mL	0.33
A9I0002-03	Soil	NWTPH-Gx (MS)	08/29/19 09:40	08/29/19 09:40	13.27g/5mL	5g/5mL	0.38
A9I0002-04	Soil	NWTPH-Gx (MS)	08/29/19 12:10	08/29/19 12:10	12.7g/5mL	5g/5mL	0.39
A9I0002-05	Soil	NWTPH-Gx (MS)	08/29/19 12:45	08/29/19 12:45	9.31g/5mL	5g/5mL	0.54
A9I0002-06	Soil	NWTPH-Gx (MS)	08/29/19 13:45	08/29/19 13:45	6.14g/5mL	5g/5mL	0.81
A9I0002-07	Soil	NWTPH-Gx (MS)	08/29/19 13:00	08/29/19 13:00	3.92g/5mL	5g/5mL	1.28
A9I0002-08	Soil	NWTPH-Gx (MS)	08/29/19 15:15	08/29/19 15:15	6.11g/5mL	5g/5mL	0.82

Volatile Organic Compounds by EPA 5035A/8260C

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9090444							
A9I0002-01	Soil	5035A/8260C	08/28/19 10:04	08/28/19 10:04	16.98g/5mL	5g/5mL	0.29
A9I0002-02	Soil	5035A/8260C	08/28/19 14:30	08/28/19 14:30	15.03g/5mL	5g/5mL	0.33
A9I0002-04	Soil	5035A/8260C	08/29/19 12:10	08/29/19 12:10	12.7g/5mL	5g/5mL	0.39
A9I0002-05	Soil	5035A/8260C	08/29/19 12:45	08/29/19 12:45	9.31g/5mL	5g/5mL	0.54
A9I0002-06	Soil	5035A/8260C	08/29/19 13:45	08/29/19 13:45	6.14g/5mL	5g/5mL	0.81
A9I0002-08	Soil	5035A/8260C	08/29/19 15:15	08/29/19 15:15	6.11g/5mL	5g/5mL	0.82
Batch: 9090488							
A9I0002-03RE1	Soil	5035A/8260C	08/29/19 09:40	08/29/19 09:40	13.27g/5mL	5g/5mL	0.38

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Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9I0002 - 10 03 19 1636**

SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 5035A/8260C

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9I0002-04RE1	Soil	5035A/8260C	08/29/19 12:10	08/29/19 12:10	12.7g/5mL	5g/5mL	0.39
A9I0002-07RE1	Soil	5035A/8260C	08/29/19 13:00	08/29/19 13:00	3.92g/5mL	5g/5mL	1.28

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9090468							
A9I0002-01	Soil	EPA 8000C	08/28/19 10:04	09/04/19 08:09			NA
A9I0002-02	Soil	EPA 8000C	08/28/19 14:30	09/04/19 08:09			NA
A9I0002-03	Soil	EPA 8000C	08/29/19 09:40	09/04/19 08:09			NA
A9I0002-04	Soil	EPA 8000C	08/29/19 12:10	09/04/19 08:09			NA
A9I0002-05	Soil	EPA 8000C	08/29/19 12:45	09/04/19 08:09			NA
A9I0002-06	Soil	EPA 8000C	08/29/19 13:45	09/04/19 08:09			NA
A9I0002-07	Soil	EPA 8000C	08/29/19 13:00	09/04/19 08:09			NA
Batch: 9090496							
A9I0002-08	Soil	EPA 8000C	08/29/19 15:15	09/04/19 14:06			NA

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

E-05	Estimated Result. Initial Calibration Verification (ICV) failed high. No affect on non-detect results.
F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation
F-18	Result for Diesel (Diesel Range Organics, C12-C24) is due to overlap from Gasoline or a Gasoline Range product.
M-02	Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
Q-02	Spike recovery is outside of established control limits due to matrix interference.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +1%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +15%. The results are reported as Estimated Values.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
S-08	TPH-Gx Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract. See 8260 results for accurate Surrogate recovery.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported.

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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LABORATORY ACCREDITATION INFORMATION

TNI Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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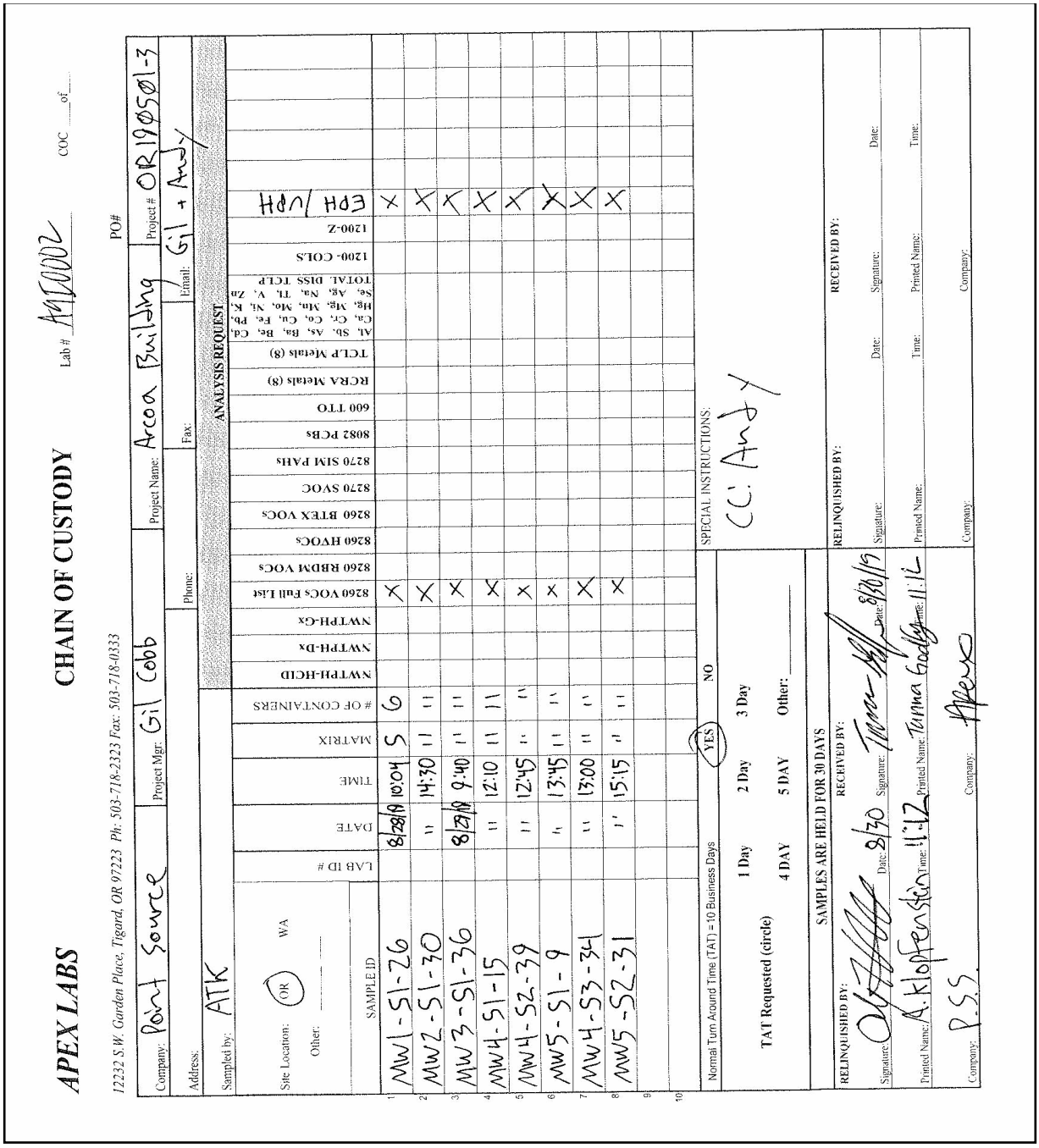

APEX LABS

CHAIN OF CUSTODY

Lab # A9I0002 COC ___ of ___

PO#

12232 S.W. Garden Place, Tigard, OR 97223 Ph. 503-718-2323 Fax: 503-718-0333

Company: Point Source | Project Mgr: Gil Cobb | Project Name: Arcoa Building | Project #: OR190501-3

Address: | Phone: | Fax: | Email: Gil + Andy

Sampled by: ATK

Site Location: OR WA

Other: ____

ANALYSIS REQUEST

#	SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 VOCs Full List	8260 RBDM VOCs	8260 HVOCs	8260 BTEX VOCs	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS TCLP	1200- COLS	1200-Z	EDH / DRH
1	MW1-S1-26		8/29/19	10:04	S	6				X												X
2	MW2-S1-30		"	14:30	"	"				X												X
3	MW3-S1-36		8/29/19	9:40	"	"				X												X
4	MW4-S1-15		"	12:10	"	"				X												X
5	MW4-S2-39		"	12:45	"	"				X												X
6	MW5-S1-9		"	13:45	"	"				X												X
7	MW4-S3-34		"	13:00	"	"				X												X
8	MW5-S2-31		"	15:15	"	"				X												X
9																						
10																						

Normal Turn Around Time (TAT) = 10 Business Days — YES / NO

SPECIAL INSTRUCTIONS: CC: Andy

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: | Printed Name: | Company:

RECEIVED BY: Signature: | Printed Name: | Company:

RELINQUISHED BY: Signature: | Printed Name: A. Kloffenstein | Company: PSS

RECEIVED BY: Signature: Tanner Holliday | Printed Name: Tanner Godfrey | Company: Apex

Date: 8/30 Time: 11:42 Date: 8/30/19 Time: 11:11

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APEX LABS COOLER RECEIPT FORM

Client: Point Source Element WO#: A9I0002

Project/Project #: Arcoa Building / OR190501-3

Delivery Info:

Date/time received: 8/30/19 @ 11:12 By: TMC

Delivered by: Apex____Client X ESS____FedEx____UPS____Swift___Senvoy ___SDS___Other_____

Cooler Inspection Date/time inspected: 8/30/19 @ 11:12 By: TMC

Chain of Custody included? Yes X No ___ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.3						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Gel and Real						
Condition:	good						

Cooler out of temp? (Y/N) Possible reason why:

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 9/3/19 @ 8:25 By: KMS

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? Yes ___ No X Comments: No T on 40z Jars on MW1-51-26, No T on the rest of cants. ID on MW5-42-31, MW4-52-39 *

COC/container discrepancies form initiated? Yes X No ___ NA X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments:

Additional information: On 4 MeOH vials used 8/29/30.

Labeled by: Witness: Cooler Inspected by: TMC See Project Contact Form: Y

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kevin J. Friscia, Project Manager

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info@fremontanalytical.com

Apex Laboratories
Kevin Friscia
6700 SW Sandburg St
Tigard, OR 97223

RE: A9I0002
Work Order Number: 1909037

October 03, 2019

Attention Kevin Friscia:

Fremont Analytical, Inc. received 8 sample(s) on 9/5/2019 for the analyses presented in the following report.

Extractable Petroleum Hydrocarbons by NWEPH
Sample Moisture (Percent Moisture)
Volatile Petroleum Hydrocarbons by NWVPH

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: *10/03/2019*

CLIENT: Apex Laboratories
Project: A9I0002
Work Order: 1909037

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1909037-001	MW1-S1-26	08/28/2019 10:04 AM	09/05/2019 9:46 AM
1909037-002	MW2-S1-30	08/28/2019 2:30 PM	09/05/2019 9:46 AM
1909037-003	MW3-S1-36	08/29/2019 9:40 AM	09/05/2019 9:46 AM
1909037-004	MW4-S1-15	08/29/2019 12:10 PM	09/05/2019 9:46 AM
1909037-005	MW4-S2-39	08/29/2019 12:45 PM	09/05/2019 9:46 AM
1909037-006	MW5-S1-9	08/29/2019 1:45 PM	09/05/2019 9:46 AM
1909037-007	MW4-S3-34	08/29/2019 1:00 PM	09/05/2019 9:46 AM
1909037-008	MW5-S2-31	08/29/2019 3:15 PM	09/05/2019 9:46 AM

Case Narrative

WO#: **1909037**
Date: **10/3/2019**

CLIENT: Apex Laboratories
Project: A9I0002

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.

VPH - Volatile Organic Compound detections should be confirmed by GCMS.

10/3/19: Revision 1 includes dilution data for MW5-S1-9.

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: Apex Laboratories
Collection Date: 8/28/2019 10:04:00 AM
Project: A9I0002
Lab ID: 1909037-001
Matrix: Soil
Client Sample ID: **MW1-S1-26**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	ND	21.6	*	mg/Kg-dry	1	10/1/2019 3:11:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.8		mg/Kg-dry	1	10/1/2019 3:11:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.8		mg/Kg-dry	1	10/1/2019 3:11:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.8		mg/Kg-dry	1	10/1/2019 3:11:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.8		mg/Kg-dry	1	10/1/2019 3:11:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.8	*	mg/Kg-dry	1	10/2/2019 2:45:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	10.8		mg/Kg-dry	1	10/2/2019 2:45:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	10.8		mg/Kg-dry	1	10/2/2019 2:45:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	10.8		mg/Kg-dry	1	10/2/2019 2:45:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	10.8	*	mg/Kg-dry	1	10/2/2019 2:45:00 AM
Surr: 1-Chlorooctadecane	84.5	60 - 140		%Rec	1	10/1/2019 3:11:00 PM
Surr: o-Terphenyl	85.0	60 - 140		%Rec	1	10/2/2019 2:45:00 AM

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	0.561		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Aliphatic Hydrocarbon (C6-C8)	ND	0.802		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Aliphatic Hydrocarbon (C8-C10)	ND	0.449		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Aliphatic Hydrocarbon (C10-C12)	ND	0.481		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Aromatic Hydrocarbon (C8-C10)	ND	0.962		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.192		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Aromatic Hydrocarbon (C12-C13)	ND	2.24		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Benzene	ND	0.192		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Toluene	ND	0.224		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Ethylbenzene	ND	0.224		mg/Kg-dry	1	9/9/2019 8:54:09 PM
m,p-Xylene	ND	0.417		mg/Kg-dry	1	9/9/2019 8:54:09 PM
o-Xylene	ND	0.192		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Naphthalene	ND	0.160		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Methyl tert-butyl ether (MTBE)	ND	0.160		mg/Kg-dry	1	9/9/2019 8:54:09 PM
Surr: 1,4-Difluorobenzene	87.9	65 - 140		%Rec	1	9/9/2019 8:54:09 PM
Surr: Bromofluorobenzene	91.1	65 - 140		%Rec	1	9/9/2019 8:54:09 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	11.2	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/28/2019 2:30:00 PM
Project: A9I0002
Lab ID: 1909037-002
Matrix: Soil
Client Sample ID: **MW2-S1-30**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	ND	20.1	*	mg/Kg-dry	1	10/1/2019 3:54:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.0		mg/Kg-dry	1	10/1/2019 3:54:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.0		mg/Kg-dry	1	10/1/2019 3:54:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.0		mg/Kg-dry	1	10/1/2019 3:54:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.0		mg/Kg-dry	1	10/1/2019 3:54:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.0	*	mg/Kg-dry	1	10/2/2019 3:28:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	10.0		mg/Kg-dry	1	10/2/2019 3:28:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	10.0		mg/Kg-dry	1	10/2/2019 3:28:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	10.0		mg/Kg-dry	1	10/2/2019 3:28:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	10.0	*	mg/Kg-dry	1	10/2/2019 3:28:00 AM
Surr: 1-Chlorooctadecane	83.4	60 - 140		%Rec	1	10/1/2019 3:54:00 PM
Surr: o-Terphenyl	80.8	60 - 140		%Rec	1	10/2/2019 3:28:00 AM

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

Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	0.638		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Aliphatic Hydrocarbon (C6-C8)	ND	0.912		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Aliphatic Hydrocarbon (C8-C10)	ND	0.511		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Aliphatic Hydrocarbon (C10-C12)	ND	0.547		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Aromatic Hydrocarbon (C8-C10)	ND	1.09		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.219		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Aromatic Hydrocarbon (C12-C13)	ND	2.55		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Benzene	ND	0.219		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Toluene	ND	0.255		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Ethylbenzene	ND	0.255		mg/Kg-dry	1	9/9/2019 9:35:16 PM
m,p-Xylene	ND	0.474		mg/Kg-dry	1	9/9/2019 9:35:16 PM
o-Xylene	ND	0.219		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Naphthalene	ND	0.182		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.182		mg/Kg-dry	1	9/9/2019 9:35:16 PM
Surr: 1,4-Difluorobenzene	90.6	65 - 140		%Rec	1	9/9/2019 9:35:16 PM
Surr: Bromofluorobenzene	94.8	65 - 140		%Rec	1	9/9/2019 9:35:16 PM

Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	15.1	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/29/2019 9:40:00 AM
Project: A9I0002
Lab ID: 1909037-003
Matrix: Soil
Client Sample ID: **MW3-S1-36**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	ND	26.1	*	mg/Kg-dry	1	10/1/2019 4:39:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	13.1		mg/Kg-dry	1	10/1/2019 4:39:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	13.1		mg/Kg-dry	1	10/1/2019 4:39:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	13.1		mg/Kg-dry	1	10/1/2019 4:39:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	13.1		mg/Kg-dry	1	10/1/2019 4:39:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	13.1	*	mg/Kg-dry	1	10/2/2019 4:11:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	13.1		mg/Kg-dry	1	10/2/2019 4:11:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	13.1		mg/Kg-dry	1	10/2/2019 4:11:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	13.1		mg/Kg-dry	1	10/2/2019 4:11:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	13.1	*	mg/Kg-dry	1	10/2/2019 4:11:00 AM
Surr: 1-Chlorooctadecane	85.4	60 - 140		%Rec	1	10/1/2019 4:39:00 PM
Surr: o-Terphenyl	86.5	60 - 140		%Rec	1	10/2/2019 4:11:00 AM

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	0.810		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Aliphatic Hydrocarbon (C6-C8)	ND	1.16		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Aliphatic Hydrocarbon (C8-C10)	33.2	0.648	B	mg/Kg-dry	1	9/9/2019 10:16:25 PM
Aliphatic Hydrocarbon (C10-C12)	24.5	6.94	D	mg/Kg-dry	10	9/10/2019 8:14:00 PM
Aromatic Hydrocarbon (C8-C10)	37.9	1.39		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Aromatic Hydrocarbon (C10-C12)	49.1	2.78	D	mg/Kg-dry	10	9/10/2019 8:14:00 PM
Aromatic Hydrocarbon (C12-C13)	22.7	3.24		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Benzene	ND	0.278		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Toluene	ND	0.324		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Ethylbenzene	ND	0.324		mg/Kg-dry	1	9/9/2019 10:16:25 PM
m,p-Xylene	ND	0.602		mg/Kg-dry	1	9/9/2019 10:16:25 PM
o-Xylene	ND	0.278		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Naphthalene	ND	0.231		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Methyl tert-butyl ether (MTBE)	ND	0.231		mg/Kg-dry	1	9/9/2019 10:16:25 PM
Surr: 1,4-Difluorobenzene	88.9	65 - 140		%Rec	1	9/9/2019 10:16:25 PM
Surr: Bromofluorobenzene	114	65 - 140		%Rec	1	9/9/2019 10:16:25 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	23.9	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/29/2019 12:10:00 PM
Project: A9I0002
Lab ID: 1909037-004
Matrix: Soil
Client Sample ID: **MW4-S1-15**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	417	23.0	*	mg/Kg-dry	1	10/1/2019 5:22:00 PM
Aliphatic Hydrocarbon (C10-C12)	158	11.5		mg/Kg-dry	1	10/1/2019 5:22:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	11.5		mg/Kg-dry	1	10/1/2019 5:22:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	11.5		mg/Kg-dry	1	10/1/2019 5:22:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	11.5		mg/Kg-dry	1	10/1/2019 5:22:00 PM
Aromatic Hydrocarbon (C8-C10)	27.4	11.5	*	mg/Kg-dry	1	10/2/2019 4:54:00 AM
Aromatic Hydrocarbon (C10-C12)	20.6	11.5		mg/Kg-dry	1	10/2/2019 4:54:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	11.5		mg/Kg-dry	1	10/2/2019 4:54:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	11.5		mg/Kg-dry	1	10/2/2019 4:54:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	11.5	*	mg/Kg-dry	1	10/2/2019 4:54:00 AM
Surr: 1-Chlorooctadecane	80.6	60 - 140		%Rec	1	10/1/2019 5:22:00 PM
Surr: o-Terphenyl	83.6	60 - 140		%Rec	1	10/2/2019 4:54:00 AM

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

Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	1.11		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Aliphatic Hydrocarbon (C6-C8)	4.47	1.58		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Aliphatic Hydrocarbon (C8-C10)	76.6	0.885		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Aliphatic Hydrocarbon (C10-C12)	61.6	9.39	D	mg/Kg-dry	10	9/10/2019 5:07:00 AM
Aromatic Hydrocarbon (C8-C10)	117	1.90		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Aromatic Hydrocarbon (C10-C12)	133	3.76	D	mg/Kg-dry	10	9/10/2019 5:07:00 AM
Aromatic Hydrocarbon (C12-C13)	ND	43.8	D	mg/Kg-dry	10	9/10/2019 5:07:00 AM
Benzene	ND	0.379		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Toluene	ND	0.443		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Ethylbenzene	0.994	0.443		mg/Kg-dry	1	9/10/2019 8:33:02 AM
m,p-Xylene	ND	0.822		mg/Kg-dry	1	9/10/2019 8:33:02 AM
o-Xylene	1.21	0.379		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Naphthalene	2.21	0.316		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.316		mg/Kg-dry	1	9/10/2019 8:33:02 AM
Surr: 1,4-Difluorobenzene	93.9	65 - 140		%Rec	1	9/10/2019 8:33:02 AM
Surr: Bromofluorobenzene	112	65 - 140		%Rec	1	9/10/2019 8:33:02 AM

Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	26.8	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/29/2019 12:45:00 PM
Project: A9I0002
Lab ID: 1909037-005
Matrix: Soil
Client Sample ID: **MW4-S2-39**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	ND	20.8	*	mg/Kg-dry	1	10/1/2019 6:06:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.4		mg/Kg-dry	1	10/1/2019 6:06:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.4		mg/Kg-dry	1	10/1/2019 6:06:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.4		mg/Kg-dry	1	10/1/2019 6:06:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.4		mg/Kg-dry	1	10/1/2019 6:06:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.4	*	mg/Kg-dry	1	10/2/2019 5:36:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	10.4		mg/Kg-dry	1	10/2/2019 5:36:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	10.4		mg/Kg-dry	1	10/2/2019 5:36:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	10.4		mg/Kg-dry	1	10/2/2019 5:36:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	10.4	*	mg/Kg-dry	1	10/2/2019 5:36:00 AM
Surr: 1-Chlorooctadecane	97.2	60 - 140		%Rec	1	10/1/2019 6:06:00 PM
Surr: o-Terphenyl	91.2	60 - 140		%Rec	1	10/2/2019 5:36:00 AM

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

Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	0.827		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Aliphatic Hydrocarbon (C6-C8)	ND	1.18		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Aliphatic Hydrocarbon (C8-C10)	ND	0.662		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Aliphatic Hydrocarbon (C10-C12)	ND	0.709		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Aromatic Hydrocarbon (C8-C10)	ND	1.42		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Aromatic Hydrocarbon (C10-C12)	0.617	0.284		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Aromatic Hydrocarbon (C12-C13)	4.35	3.31		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Benzene	ND	0.284		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Toluene	ND	0.331		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Ethylbenzene	ND	0.331		mg/Kg-dry	1	9/10/2019 6:51:51 PM
m,p-Xylene	ND	0.614		mg/Kg-dry	1	9/10/2019 6:51:51 PM
o-Xylene	ND	0.284		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Naphthalene	0.569	0.236		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Methyl tert-butyl ether (MTBE)	ND	0.236		mg/Kg-dry	1	9/10/2019 6:51:51 PM
Surr: 1,4-Difluorobenzene	93.8	65 - 140		%Rec	1	9/10/2019 6:51:51 PM
Surr: Bromofluorobenzene	100	65 - 140		%Rec	1	9/10/2019 6:51:51 PM

Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	13.7	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/29/2019 1:45:00 PM
Project: A9I0002
Lab ID: 1909037-006
Matrix: Soil
Client Sample ID: **MW5-S1-9**

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25748 Analyst: DW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Aliphatic Hydrocarbon (C8-C10)	1,180	130	D*	mg/Kg-dry	5	10/2/2019 8:48:00 PM
Aliphatic Hydrocarbon (C10-C12)	418	13.0		mg/Kg-dry	1	10/1/2019 6:50:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	13.0		mg/Kg-dry	1	10/1/2019 6:50:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	13.0		mg/Kg-dry	1	10/1/2019 6:50:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	13.0		mg/Kg-dry	1	10/1/2019 6:50:00 PM
Aromatic Hydrocarbon (C8-C10)	111	13.0	*	mg/Kg-dry	1	10/2/2019 6:19:00 AM
Aromatic Hydrocarbon (C10-C12)	51.6	13.0		mg/Kg-dry	1	10/2/2019 6:19:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	13.0		mg/Kg-dry	1	10/2/2019 6:19:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	13.0		mg/Kg-dry	1	10/2/2019 6:19:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	13.0	*	mg/Kg-dry	1	10/2/2019 6:19:00 AM
Surr: 1-Chlorooctadecane	78.8	60 - 140		%Rec	1	10/1/2019 6:50:00 PM
Surr: o-Terphenyl	77.0	60 - 140		%Rec	1	10/2/2019 6:19:00 AM

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

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25751 Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	18.7	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Aliphatic Hydrocarbon (C6-C8)	46.8	26.6	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Aliphatic Hydrocarbon (C8-C10)	2,830	74.6	D	mg/Kg-dry	50	9/10/2019 4:25:51 AM
Aliphatic Hydrocarbon (C10-C12)	2,450	79.9	D	mg/Kg-dry	50	9/10/2019 4:25:51 AM
Aromatic Hydrocarbon (C8-C10)	2,780	160	D	mg/Kg-dry	50	9/10/2019 4:25:51 AM
Aromatic Hydrocarbon (C10-C12)	2,370	32.0	D	mg/Kg-dry	50	9/10/2019 4:25:51 AM
Aromatic Hydrocarbon (C12-C13)	240	74.6	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Benzene	ND	6.40	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Toluene	ND	7.46	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Ethylbenzene	ND	7.46	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
m,p-Xylene	ND	13.9	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
o-Xylene	49.0	6.40	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Naphthalene	12.8	5.33	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Methyl tert-butyl ether (MTBE)	ND	5.33	D	mg/Kg-dry	10	9/10/2019 7:10:52 AM
Surr: 1,4-Difluorobenzene	91.8	65 - 140	D	%Rec	10	9/10/2019 7:10:52 AM
Surr: Bromofluorobenzene	102	65 - 140	D	%Rec	10	9/10/2019 7:10:52 AM

Sample Moisture (Percent Moisture)

Batch ID: R53712 Analyst: CJ

Percent Moisture	24.7	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/29/2019 1:00:00 PM
Project: A9I0002
Lab ID: 1909037-007
Matrix: Soil
Client Sample ID: **MW4-S3-34**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	60.5	19.3	*	mg/Kg-dry	1	10/1/2019 7:33:00 PM
Aliphatic Hydrocarbon (C10-C12)	37.2	9.66		mg/Kg-dry	1	10/1/2019 7:33:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	9.66		mg/Kg-dry	1	10/1/2019 7:33:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	9.66		mg/Kg-dry	1	10/1/2019 7:33:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	9.66		mg/Kg-dry	1	10/1/2019 7:33:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	9.66	*	mg/Kg-dry	1	10/2/2019 7:02:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	9.66		mg/Kg-dry	1	10/2/2019 7:02:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	9.66		mg/Kg-dry	1	10/2/2019 7:02:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	9.66		mg/Kg-dry	1	10/2/2019 7:02:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	9.66	*	mg/Kg-dry	1	10/2/2019 7:02:00 AM
Surr: 1-Chlorooctadecane	86.6	60 - 140		%Rec	1	10/1/2019 7:33:00 PM
Surr: o-Terphenyl	84.2	60 - 140		%Rec	1	10/2/2019 7:02:00 AM

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	2.40		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Aliphatic Hydrocarbon (C6-C8)	ND	3.43		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Aliphatic Hydrocarbon (C8-C10)	23.3	1.92		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Aliphatic Hydrocarbon (C10-C12)	27.3	2.06		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Aromatic Hydrocarbon (C8-C10)	20.2	4.12		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Aromatic Hydrocarbon (C10-C12)	35.3	0.824		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Aromatic Hydrocarbon (C12-C13)	ND	9.61		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Benzene	ND	0.824		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Toluene	ND	0.961		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Ethylbenzene	ND	0.961		mg/Kg-dry	1	9/9/2019 11:38:58 PM
m,p-Xylene	ND	1.78		mg/Kg-dry	1	9/9/2019 11:38:58 PM
o-Xylene	ND	0.824		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Naphthalene	ND	0.687		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Methyl tert-butyl ether (MTBE)	ND	0.687		mg/Kg-dry	1	9/9/2019 11:38:58 PM
Surr: 1,4-Difluorobenzene	90.9	65 - 140		%Rec	1	9/9/2019 11:38:58 PM
Surr: Bromofluorobenzene	104	65 - 140		%Rec	1	9/9/2019 11:38:58 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	8.67	0.500		wt%	1	9/6/2019 11:02:39 AM

Client: Apex Laboratories
Collection Date: 8/29/2019 3:15:00 PM
Project: A9I0002
Lab ID: 1909037-008
Matrix: Soil
Client Sample ID: **MW5-S2-31**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 25748		Analyst: DW
Aliphatic Hydrocarbon (C8-C10)	100	21.5	*	mg/Kg-dry	1	10/1/2019 8:17:00 PM
Aliphatic Hydrocarbon (C10-C12)	52.6	10.8		mg/Kg-dry	1	10/1/2019 8:17:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.8		mg/Kg-dry	1	10/1/2019 8:17:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.8		mg/Kg-dry	1	10/1/2019 8:17:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.8		mg/Kg-dry	1	10/1/2019 8:17:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.8	*	mg/Kg-dry	1	10/2/2019 7:45:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	10.8		mg/Kg-dry	1	10/2/2019 7:45:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	10.8		mg/Kg-dry	1	10/2/2019 7:45:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	10.8		mg/Kg-dry	1	10/2/2019 7:45:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	10.8	*	mg/Kg-dry	1	10/2/2019 7:45:00 AM
Surr: 1-Chlorooctadecane	67.9	60 - 140		%Rec	1	10/1/2019 8:17:00 PM
Surr: o-Terphenyl	57.1	60 - 140	S	%Rec	1	10/2/2019 7:45:00 AM

NOTES:
* - Flagged value is not within established control limits.
S - Outlying surrogate recovery(ies) observed.

Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 25751		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	1.69		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.42		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Aliphatic Hydrocarbon (C8-C10)	50.4	1.35		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Aliphatic Hydrocarbon (C10-C12)	41.9	14.5	D	mg/Kg-dry	10	9/10/2019 8:55:06 PM
Aromatic Hydrocarbon (C8-C10)	58.9	2.90		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Aromatic Hydrocarbon (C10-C12)	58.5	5.80	D	mg/Kg-dry	10	9/10/2019 8:55:06 PM
Aromatic Hydrocarbon (C12-C13)	24.2	6.77		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Benzene	ND	0.580		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Toluene	ND	0.677		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Ethylbenzene	ND	0.677		mg/Kg-dry	1	9/10/2019 1:00:59 AM
m,p-Xylene	ND	1.26		mg/Kg-dry	1	9/10/2019 1:00:59 AM
o-Xylene	ND	0.580		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Naphthalene	ND	0.484		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Methyl tert-butyl ether (MTBE)	ND	0.484		mg/Kg-dry	1	9/10/2019 1:00:59 AM
Surr: 1,4-Difluorobenzene	90.1	65 - 140		%Rec	1	9/10/2019 1:00:59 AM
Surr: Bromofluorobenzene	113	65 - 140		%Rec	1	9/10/2019 1:00:59 AM

Sample Moisture (Percent Moisture)				Batch ID: R53712		Analyst: CJ
Percent Moisture	8.61	0.500		wt%	1	9/6/2019 11:02:39 AM

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **LCS-25748**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **9/9/2019**	RunNo: **54318**
Client ID: **LCSS**	Batch ID: **25748**		Analysis Date: **9/24/2019**	SeqNo: **1076020**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	76.2	10.0	250.0	0	30.5	70	130				S
Aromatic Hydrocarbon (C10-C12)	91.0	10.0	125.0	0	72.8	70	130				
Aromatic Hydrocarbon (C12-C16)	97.6	10.0	125.0	0	78.1	70	130				
Aromatic Hydrocarbon (C16-C21)	99.6	10.0	125.0	0	79.7	70	130				
Aromatic Hydrocarbon (C21-C34)	83.5	10.0	125.0	0	66.8	70	130				S
Surr: o-Terphenyl	78.8		100.0		78.8	60	140				

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

Sample ID: **MB-25748**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **9/9/2019**	RunNo: **54318**
Client ID: **MBLKS**	Batch ID: **25748**		Analysis Date: **10/1/2019**	SeqNo: **1075982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	20.0									*
Aliphatic Hydrocarbon (C10-C12)	ND	10.0									
Aliphatic Hydrocarbon (C12-C16)	ND	10.0									
Aliphatic Hydrocarbon (C16-C21)	ND	10.0									
Aliphatic Hydrocarbon (C21-C34)	ND	10.0									
Surr: 1-Chlorooctadecane	86.1		100.0		86.1	60	140				

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

Sample ID: **LCS-25748**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **9/9/2019**	RunNo: **54318**
Client ID: **LCSS**	Batch ID: **25748**		Analysis Date: **10/1/2019**	SeqNo: **1075981**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	118	20.0	250.0	0	47.2	70	130				S
Aliphatic Hydrocarbon (C10-C12)	89.9	10.0	125.0	0	71.9	70	130				
Aliphatic Hydrocarbon (C12-C16)	109	10.0	125.0	0	86.8	70	130				
Aliphatic Hydrocarbon (C16-C21)	106	10.0	125.0	0	85.1	70	130				
Aliphatic Hydrocarbon (C21-C34)	128	10.0	125.0	0	102	70	130				
Surr: 1-Chlorooctadecane	81.0		100.0		81.0	60	140				

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **LCS-25748**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **9/9/2019**	RunNo: **54318**
Client ID: **LCSS**	Batch ID: **25748**		Analysis Date: **10/1/2019**	SeqNo: **1075981**

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

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

Sample ID: **MB-25748**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **9/9/2019**	RunNo: **54318**
Client ID: **MBLKS**	Batch ID: **25748**		Analysis Date: **10/2/2019**	SeqNo: **1076031**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	ND	10.0									*
Aromatic Hydrocarbon (C10-C12)	ND	10.0									
Aromatic Hydrocarbon (C12-C16)	ND	10.0									
Aromatic Hydrocarbon (C16-C21)	ND	10.0									
Aromatic Hydrocarbon (C21-C34)	ND	10.0									*
Surr: o-Terphenyl	87.3		100.0		87.3	60	140				

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

Sample ID: **1909029-001ADUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **9/9/2019**	RunNo: **54318**
Client ID: **BATCH**	Batch ID: **25748**		Analysis Date: **10/2/2019**	SeqNo: **1076584**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	21.3						0		25	*
Aliphatic Hydrocarbon (C10-C12)	ND	10.7						0		25	
Aliphatic Hydrocarbon (C12-C16)	ND	10.7						0		25	
Aliphatic Hydrocarbon (C16-C21)	ND	10.7						0		25	
Aliphatic Hydrocarbon (C21-C34)	ND	10.7						0		25	
Surr: 1-Chlorooctadecane	82.5		106.6		77.3	60	140		0		

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

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **1909029-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **54318**
Client ID: **BATCH** Batch ID: **25748** Analysis Date: **10/2/2019** SeqNo: **1076585**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	108	21.0	262.1	2.293	40.2	70	130				S
Aliphatic Hydrocarbon (C10-C12)	83.9	10.5	131.1	0	64.0	70	130				S
Aliphatic Hydrocarbon (C12-C16)	101	10.5	131.1	0	77.4	70	130				
Aliphatic Hydrocarbon (C16-C21)	102	10.5	131.1	0	77.6	70	130				
Aliphatic Hydrocarbon (C21-C34)	121	10.5	131.1	0	92.3	70	130				
Surr: 1-Chlorooctadecane	78.1		104.9		74.5	60	140				

NOTES:
S - Outlying spike recovery(ies) observed.

Sample ID: **1909029-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **54318**
Client ID: **BATCH** Batch ID: **25748** Analysis Date: **10/2/2019** SeqNo: **1076586**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	128	20.3	254.1	2.293	49.4	70	130	107.6	17.1	30	S
Aliphatic Hydrocarbon (C10-C12)	92.9	10.2	127.0	0	73.1	70	130	83.92	10.1	30	
Aliphatic Hydrocarbon (C12-C16)	103	10.2	127.0	0	81.1	70	130	101.4	1.62	30	
Aliphatic Hydrocarbon (C16-C21)	106	10.2	127.0	0	83.2	70	130	101.7	3.86	30	
Aliphatic Hydrocarbon (C21-C34)	114	10.2	127.0	0	89.9	70	130	121.0	5.78	30	
Surr: 1-Chlorooctadecane	83.6		101.6		82.2	60	140		0		

NOTES:
S - Outlying spike recovery observed.

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **LCS-25751** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **LCSS** Batch ID: **25751** Analysis Date: **9/9/2019** SeqNo: **1065510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	31.0	1.75	30.00	0	103	70	130				
Aliphatic Hydrocarbon (C6-C8)	9.98	2.50	10.00	0	99.8	70	130				
Aliphatic Hydrocarbon (C8-C10)	9.97	1.40	10.00	0	99.7	70	130				
Aliphatic Hydrocarbon (C10-C12)	9.76	1.50	10.00	0	97.6	70	130				
Aromatic Hydrocarbon (C8-C10)	40.6	3.00	40.00	0	101	70	130				
Aromatic Hydrocarbon (C10-C12)	11.0	0.600	10.00	0	110	70	130				
Aromatic Hydrocarbon (C12-C13)	10.8	7.00	10.00	0	108	70	130				
Benzene	10.2	0.600	10.00	0	102	70	130				
Toluene	10.2	0.700	10.00	0	102	70	130				
Ethylbenzene	10.2	0.700	10.00	0	102	70	130				
m,p-Xylene	20.6	1.30	20.00	0	103	70	130				
o-Xylene	10.2	0.600	10.00	0	102	70	130				
Naphthalene	10.3	0.500	10.00	0	103	70	130				
Methyl tert-butyl ether (MTBE)	10.7	0.500	10.00	0	107	70	130				
Surr: 1,4-Difluorobenzene	2.44		2.500		97.6	65	140				
Surr: Bromofluorobenzene	2.42		2.500		96.8	65	140				

Sample ID: **MB-25751** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **MBLKS** Batch ID: **25751** Analysis Date: **9/9/2019** SeqNo: **1065511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	1.75		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	2.50		0	0						
Aliphatic Hydrocarbon (C8-C10)	ND	1.40		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	1.50		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	3.00		0	0						
Aromatic Hydrocarbon (C10-C12)	ND	0.600		0	0						
Aromatic Hydrocarbon (C12-C13)	ND	7.00		0	0						
Benzene	ND	0.600		0	0						
Toluene	ND	0.700		0	0						

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **MB-25751** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **MBLKS** Batch ID: **25751** Analysis Date: **9/9/2019** SeqNo: **1065511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	0.700		0	0						
m,p-Xylene	ND	1.30		0	0						
o-Xylene	ND	0.600		0	0						
Naphthalene	ND	0.500		0	0						
Methyl tert-butyl ether (MTBE)	ND	0.500		0	0						
Surr: 1,4-Difluorobenzene	2.19		2.500		87.8	65	140				
Surr: Bromofluorobenzene	2.30		2.500		92.2	65	140				

Sample ID: **1909037-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **MW4-S3-34** Batch ID: **25751** Analysis Date: **9/10/2019** SeqNo: **1065500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	2.40		0	0			0		25	
Aliphatic Hydrocarbon (C6-C8)	ND	3.43		0	0			0		25	
Aliphatic Hydrocarbon (C8-C10)	26.7	1.92		0	0			23.35	13.4	25	
Aliphatic Hydrocarbon (C10-C12)	27.6	2.06		0	0			27.26	1.27	25	
Aromatic Hydrocarbon (C8-C10)	24.9	4.12		0	0			20.18	20.9	25	
Aromatic Hydrocarbon (C10-C12)	40.3	0.824		0	0			35.30	13.2	25	
Aromatic Hydrocarbon (C12-C13)	ND	9.61		0	0			0		25	
Benzene	ND	0.824		0	0			0		25	
Toluene	ND	0.961		0	0			0		25	
Ethylbenzene	ND	0.961		0	0			0		25	
m,p-Xylene	ND	1.78		0	0			0		25	
o-Xylene	ND	0.824		0	0			0		25	
Naphthalene	ND	0.687		0	0			0		25	
Methyl tert-butyl ether (MTBE)	ND	0.687		0	0			0		25	
Surr: 1,4-Difluorobenzene	3.12		3.433		91.0	65	140		0		
Surr: Bromofluorobenzene	3.62		3.433		105	65	140		0		

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **1909037-008BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **MW5-S2-31** Batch ID: **25751** Analysis Date: **9/10/2019** SeqNo: **1065503**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	30.9	1.69	29.02	0	106	70	130				
Aliphatic Hydrocarbon (C6-C8)	11.0	2.42	9.672	0	114	70	130				
Aliphatic Hydrocarbon (C8-C10)	59.2	1.35	9.672	50.39	90.7	70	130				
Aliphatic Hydrocarbon (C10-C12)	78.6	1.45	9.672	69.18	97.5	70	130				E
Aromatic Hydrocarbon (C8-C10)	99.7	2.90	38.69	58.91	106	70	130				
Aromatic Hydrocarbon (C10-C12)	115	0.580	9.672	105.6	97.7	70	130				E
Aromatic Hydrocarbon (C12-C13)	34.2	6.77	9.672	24.17	104	70	130				
Benzene	10.9	0.580	9.672	0	113	70	130				
Toluene	11.0	0.677	9.672	0	113	70	130				
Ethylbenzene	11.1	0.677	9.672	0	115	70	130				
m,p-Xylene	22.5	1.26	19.34	0	116	70	130				
o-Xylene	12.3	0.580	9.672	0	127	70	130				
Naphthalene	9.01	0.484	9.672	0.1602	91.5	70	130				
Methyl tert-butyl ether (MTBE)	10.2	0.484	9.672	0	106	70	130				
Surr: 1,4-Difluorobenzene	2.45		2.418		101	65	140				
Surr: Bromofluorobenzene	2.74		2.418		113	65	140				

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **1909037-008BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **MW5-S2-31** Batch ID: **25751** Analysis Date: **9/10/2019** SeqNo: **1065504**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	29.1	1.69	29.02	0	100	70	130	30.87	5.83	30	
Aliphatic Hydrocarbon (C6-C8)	10.4	2.42	9.672	0	108	70	130	11.04	5.54	30	
Aliphatic Hydrocarbon (C8-C10)	60.0	1.35	9.672	50.39	99.0	70	130	59.17	1.34	30	
Aliphatic Hydrocarbon (C10-C12)	80.4	1.45	9.672	69.18	116	70	130	78.61	2.22	30	E
Aromatic Hydrocarbon (C8-C10)	99.4	2.90	38.69	58.91	105	70	130	99.73	0.362	30	
Aromatic Hydrocarbon (C10-C12)	116	0.580	9.672	105.6	105	70	130	115.1	0.640	30	E
Aromatic Hydrocarbon (C12-C13)	37.0	6.77	9.672	24.17	133	70	130	34.24	7.77	30	S
Benzene	10.3	0.580	9.672	0	106	70	130	10.88	5.51	30	

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **1909037-008BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **MW5-S2-31** Batch ID: **25751** Analysis Date: **9/10/2019** SeqNo: **1065504**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	10.3	0.677	9.672	0	106	70	130	10.96	6.39	30	
Ethylbenzene	10.3	0.677	9.672	0	107	70	130	11.10	7.46	30	
m,p-Xylene	20.9	1.26	19.34	0	108	70	130	22.48	7.37	30	
o-Xylene	11.6	0.580	9.672	0	120	70	130	12.29	5.51	30	
Naphthalene	10.1	0.484	9.672	0.1602	103	70	130	9.009	11.5	30	
Methyl tert-butyl ether (MTBE)	9.64	0.484	9.672	0	99.7	70	130	10.21	5.72	30	
Surr: 1,4-Difluorobenzene	2.40		2.418		99.1	65	140		0		
Surr: Bromofluorobenzene	2.86		2.418		118	65	140		0		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **1909029-003BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **BATCH** Batch ID: **25751** Analysis Date: **9/10/2019** SeqNo: **1065488**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	20.2		0	0			0		25	D
Aliphatic Hydrocarbon (C6-C8)	158	28.9		0	0			165.7	4.53	25	D
Aliphatic Hydrocarbon (C8-C10)	150	16.2		0	0			150.4	0.0301	25	D
Aliphatic Hydrocarbon (C10-C12)	235	17.3		0	0			234.5	0.246	25	D
Aromatic Hydrocarbon (C8-C10)	388	34.6		0	0			409.7	5.44	25	D
Aromatic Hydrocarbon (C10-C12)	761	6.93		0	0			822.3	7.76	25	DE
Aromatic Hydrocarbon (C12-C13)	1,150	80.8		0	0			1,163	1.02	25	DE
Benzene	ND	6.93		0	0			0		25	D
Toluene	18.4	8.08		0	0			19.09	3.88	25	D
Ethylbenzene	ND	8.08		0	0			0		25	D
m,p-Xylene	114	15.0		0	0			117.7	3.33	25	D
o-Xylene	48.9	6.93		0	0			50.92	3.96	25	D
Naphthalene	32.4	5.77		0	0			32.44	0.00784	25	D
Methyl tert-butyl ether (MTBE)	ND	5.77		0	0			0		25	D
Surr: 1,4-Difluorobenzene	28.4		28.86		98.5	65	140		0		D

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **1909029-003BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/9/2019** RunNo: **53825**
Client ID: **BATCH** Batch ID: **25751** Analysis Date: **9/10/2019** SeqNo: **1065488**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene	31.5		28.86		109	65	140		0		D

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 1909037
CLIENT: Apex Laboratories
Project: A9I0002

QC SUMMARY REPORT

Sample Moisture (Percent Moisture)

Sample ID: **1909040-002ADUP** SampType: **DUP** Units: **wt%** Prep Date: **9/6/2019** RunNo: **53712**
Client ID: **BATCH** Batch ID: **R53712** Analysis Date: **9/6/2019** SeqNo: **1063160**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	3.19	0.500						3.207	0.485	20	

Sample ID: **1909037-004ADUP** SampType: **DUP** Units: **wt%** Prep Date: **9/6/2019** RunNo: **53712**
Client ID: **MW4-S1-15** Batch ID: **R53712** Analysis Date: **9/6/2019** SeqNo: **1063167**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	26.1	0.500						26.78	2.72	20	

Sample Log-In Check List

Client Name:	**APEX**	Work Order Number:	**1909037**
Logged by:	**Carissa True**	Date Received:	**9/5/2019 9:46:00 AM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	6.1
Sample 1	3.9
Temp Blank 1	6.0

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

HF 9-3-19
(8)

SUBCONTRACT ORDER

Apex Laboratories

A9I0002 1909037

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Kevin J. Friscia

RECEIVING LABORATORY:

Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103
Phone :(206) 352-3790
Fax: (206) 352-7178

No T on 4oz Jars.

Sample Name: MW1-S1-26 **Soil** **Sampled: 08/28/19 10:04** (A9I0002-01)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/11/19 10:04	
NWTPH-VPH (Sub)	09/11/19 17:00	09/11/19 10:04	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

No T on Conts.

Sample Name: MW2-S1-30 **Soil** **Sampled: 08/28/19 14:30** (A9I0002-02)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/11/19 14:30	
NWTPH-VPH (Sub)	09/11/19 17:00	09/11/19 14:30	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

No T on Conts.

Sample Name: MW3-S1-36 **Soil** **Sampled: 08/29/19 09:40** (A9I0002-03)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/12/19 09:40	
NWTPH-VPH (Sub)	09/11/19 17:00	09/12/19 09:40	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

~~7 day TAT~~ STd TAT
HF 9-3-19

Released By	Date	Received By	Date
	9/3/19 14:30	UPS (Shipper)	
UPS (Shipper)			
			9/5/19 0946

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Page 1 of 3

SUBCONTRACT ORDER

Apex Laboratories

A9I0002 1909037

No T on Conts.

Sample Name: MW4-S1-15 **Soil** **Sampled: 08/29/19 12:10** (A9I0002-04)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/12/19 12:10	
NWTPH-VPH (Sub)	09/11/19 17:00	09/12/19 12:10	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

No T on Conts. D on 1/4 MeOH Voas Reads 8/2

Sample Name: MW4-S2-39 **Soil** **Sampled: 08/29/19 12:45** (A9I0002-05)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/12/19 12:45	
NWTPH-VPH (Sub)	09/11/19 17:00	09/12/19 12:45	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

No T on Conts.

Sample Name: MW5-S1-9 **Soil** **Sampled: 08/29/19 13:45** (A9I0002-06)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/12/19 13:45	
NWTPH-VPH (Sub)	09/11/19 17:00	09/12/19 13:45	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

No T on Conts.

Sample Name: MW4-S3-34 **Soil** **Sampled: 08/29/19 13:00** (A9I0002-07)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/12/19 13:00	
NWTPH-VPH (Sub)	09/11/19 17:00	09/12/19 13:00	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

~~7 day TAT~~ STDTAT
KF 9-3-19

Released By	Date	Received By	Date
[illegible]	9/3/19 14:30	UPS (Shipper)	
UPS (Shipper)		[illegible]	9/5/19
Released By	Date	Received By	Date

8

SUBCONTRACT ORDER

Apex Laboratories

A9I0002 1909037

No T on Conts. D on 1/4 MeOH Voas Reads 8/2

Sample Name: MW5-S2-31 **Soil** **Sampled: 08/29/19 15:15** (A9I0002-08)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	09/11/19 17:00	09/12/19 15:15	
NWTPH-VPH (Sub)	09/11/19 17:00	09/12/19 15:15	
Containers Supplied:			
(B)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			
(F)40 mL VOA - 5035 (MeOH)			

~~7 day TAT~~ STD TAT
MF 9-3-19

9/3/19 14:30 — UPS (Shipper)

Released By — Date — Received By — Date

UPS (Shipper) — 9/5/19

Released By — Date — Received By — Date

10/23/19

Point Source Solutions
10445 SW Canyon Rd Suite 115
Beaverton, OR 97005

Re: OR190501 - 3

Dear Point Source Solutions

Enclosed are the results of analysis for samples received by the laboratory on 10/22/2019
The results related only to the samples included in this report.
The project was assigned a report number of 90812

If you have any questions concerning this report, please feel free to contact us.

Sincerely,

CY Chan

CY Chan
QA Officer

NW-TPHDx LABORATORY REPORT

Point Source Solutions
10445 SW Canyon Rd Suite 115
Beaverton, OR 97005

SITE NAME: Arcoa Building
SITE LOCATION:
PROJECT NUMBER: OR190501 - 3

C.O.C. NUMBER: 90812
REPORT DATE: 10/23/19

Analytical Method:NW-TPHDx **Preparation Method: EPA 3510C**
Analytes: Total Diesel and Heavy Oil range petroleum in Water

Field ID	LAB ID	Diesel (ug/L)	Heavy Oil (ug/L)	Surrogate Recovery (%)	Analytical Batch	Prepared Batch	Sampling Date
MW1	P2848	**ND**	**ND**	**123%**	**78FL1910221**	**D191022-1**	**10/22/2019**
MW2	P2849	**ND**	**ND**	**114%**	**78FL1910221**	**D191022-1**	**10/22/2019**
MW3	P2850	**ND**	**ND**	**120%**	**78FL1910221**	**D191022-1**	**10/22/2019**
MW4	P2851	**ND**	**ND**	**105%**	**78FL1910221**	**D191022-1**	**10/22/2019**
MW5	P2852	**ND**	**ND**	**129%**	**78FL1910221**	**D191022-1**	**10/22/2019**
Reporting Limit:	--	80	500				
Surrogate Limit:				50%-150%			

Surrogate is 1-ChloroOctadecane

ND = Not Detected at or below the Reporting Limit

Results relate only to samples

Chemist Initials: CY Chan **Reviewed By:** KBJ

Wy'East

Report Narrative

Method: NWTHP-Dx **Report No.** 90812

Client: Point Source Solutions **Date:** 10/22/2019

Sample Condition

5 sample(s) were analyzed for NWTPH-Dx. Sample(s)were received in acceptable condition

Sample Temperature

Sample(s) arrived within acceptable temperature range

Sample Hold time

sample(s) were analyzed within hold time

Initial Calibration

All criteria were within acceptable limits

Continuing Calibration Check (CCV)

All criteria were within method limits

Method Blank

Method Blank meets method limit

Laboratory Control Sample (LCS)

All criteria were within method limits

Duplicate Sample

No Duplicate was run on this batch

Matrix Spike

All criteria were within method limits

Matrix Spike Duplicate

All criteria were within method limits

Non-Conformance

No non-conformances were associated with this request except noticed below

Quality Control for NWTPH-Dx

Batch Date: 43760

Units: Soil Blank (mg/Kg) Water Blank (mg/L) CCV & LCS (ug/mL)

QC Blank Sample Number	PB	Diesel Result	Oil Result	Blank Control Limits Diesel	Blank Control Limits Oil	Blank CONTROL	Surrogate Recovery	Surrogate Control Limit	Surrogate CONTROL
WBK10221	D191022-1	0.00	0.00	80	100	PASS	117%	50%-150%	PASS

Diesel QC LCS Sample Number	PB	Diesel Result in Extract	Theoretical Spike Concentration	LCS Spike Recovery (%)	LCS Spike Control Limits	LCS Spike CONTROL	Surrogate Recovery	Surrogate Control Limits	Surrogate CONTROL
WLC10221	D191022-1	684.71	819.67	84%	±30%	PASS	118%	50%-150%	PASS

Oil QC LCS Sample Number	PB	Oil Result in Extract	Theoretical Spike Concentration	LCS Spike Recovery (%)	LCS Spike Control Limits	LCS Spike CONTROL	Surrogate Recovery	Surrogate Control Limits	Surrogate CONTROL
WLC10221	D191022-1	726.71	819.67	89%	±30%	PASS	118%	50%-150%	PASS

Diesel MS Sample Number	PB	Sample diesel in Extract	Diesel MS Result	MS Spike Recovery (%)	MS Control Limits	MS CONTROL
WBK77MS	D191022-1	0	835	84%	70%-130%	PASS
WBK77MSD	D191022-1	0	857	86%	70%-130%	PASS

Oil MS Sample Number	PB	Sample oil in Extract	Oil MS Result	MS Spike Recovery (%)	MS Control Limits	MS CONTROL
WBK77MS	D191022-1	0	887	89%	70%-130%	PASS
WBK77MSD	D191022-1	0	894	89%	70%-130%	PASS

Diesel MSD Sample Number	PB	Diesel MS Result	Diesel MSD Result	RPD	RPD Control Limits	MS CONTROL
WBK77MSD	D191022-1	835	857	-3%	±30	PASS

Oil MSD Sample Number	PB	Oil MS Result	Oil MSD Result	RPD	RPD Control Limits	MS CONTROL
WBK77MSD	D191022-1	887	894	-1%	±30%	PASS

NW-TPHGx LABORATORY REPORT

Point Source Solutions
10445 SW Canyon Rd Suite 115
Beaverton, OR 97005

PROJECT NAME: Arcoa Building
SITE LOCATION:
PROJECT NUMBER: OR190501 - 3

C.O.C. NUMBER: 90812
REPORT DATE: 10/23/2019

Analytical Method: NWTPH-Gx Preparation Method: EPA 5030C
Analytes: Gasoline in Water

Field ID	LAB ID	Gasoline (g/L)	Surrogate Recov. (%)	Analytical Batch	Sampling Date
MW1	**P2848**	**< 100**	**115%**	**58PI191022-1**	**10/22/2019**
MW2	**P2849**	**< 100**	**90%**	**58PI191022-1**	**10/22/2019**
MW3	**P2850**	**< 100**	**117%**	**58PI191022-1**	**10/22/2019**
MW4	**P2851**	**941**	**129%**	**58PI191022-1**	**10/22/2019**
MW5	**P2852**	**< 100**	**126%**	**58PI191022-1**	**10/22/2019**
Reporting Limit:	--	100			

Surrogate is p-Bromofluorobenzene

Results relate only to samples.

Chemist Initials: KBJ

Reviewer Initials: CY Chan

Report Narrative

Method: NWTHP-Gx **Report No.** 90812

Client: Point Source Solutions **Date:** 10/22/2019

Sample Condition
5 sample(s) were analyzed for NWTPH-Gx. Sample(s)were received in acceptable condition

Sample Temperature
Sample(s) arrived within acceptable temperature range

Sample Hold time
sample(s) were analyzed within hold time

Initial Calibration
All criteria were within acceptable limits

Continuing Calibration Check (CCV)
All criteria were within method limts

Method Blank
Method Blank meets method limt

Laboratory Control Sample (LCS)
All criteria were within method limts

Duplicate Sample
No Duplicate was run on this batch

Matrix Spike
All MS criteria were within method limts
All MSD criteria were within method limts

Matrix Spike Duplicate RPD
All criteria were within method limts

Non-Conformance
No non-conformances were associated with this request except noticed below

Quality Control Report for Water NWTPH-Gx

Batch Date 10/22/2019

Blank	*Anal. Batch*	*Result (ug/L)*	*Expected (ug/L)*	*Surr. Recovery*	*Range*
WBK10221	58PI191022-1	19	<100	119%	50%-150%

LCS	*Anal. Batch*	*Result (ug/L)*	*Expected (ug/L)*	*% Recovery*	*Range*
GCCV1	58PI191022-1	917	1000	92%	70%-130%

MS	*Anal. Batch*	*Spike(ug/L)*	*Sample(ug/L)*	*% Recovery*	*Range*
Blk66MS	58PI191022-1	917	19	90%	70%-130%
Blk66MSD	58PI191022-1	903	19	88%	70%-130%

MSD	*Anal. Batch*	*MSD(ug/L)*	*MS Result (ug/L)*	*RPD*	*Range*
Blk66MSD	58PI191022-1	903	917	2%	±30%

2415 SE 11th Ave.
Portland, OR 97214

Phone (503) 231-9320
FAX (503) 231-9344

WyEast
Environmental Sciences, Inc.
2415 SE 11th Ave. Portland Oregon 97214
Phone(503) 231-9320 FAX(503) 231-9344

CHAIN OF CUSTODY

Report Number 90812

Company PSS.	Phone 503-780-1569											Comments	
Project # OR19050 1-3	FAX											CC: Andy	
Project Name Arcoa Building	Purchase Order #												
Site	Report Attention GI	Collected By ATK											
Samples: Temperature 4°C On Ice? (Yes) / No	Turnaround Time: [X] Regular [ ] 3-5 Business Days											Analysis Requested	
LAB ID	Field ID	Sampling Date	Sampling Time	Matrix	Container	Volume	NW-TPH-Dx	NW-TPH-GX	NW-TPH-HCID	EPA 8021B (BTEX)	EPA 8270 SIM (PAH)	EPA 8260B	Rush GX!
P2848	MW1	10/22/19	7:50	W	4	-	X	X					
P2849	MW2	"	8:00	"	4	-	X	X					
P2850	MW3	"	8:50	"	4	-	X	X					
P2851	MW4	"	6:55	"	4	-	X	X					
P2852	MW5	"	6:45	"	4	-	X	X					

Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
Jake Ren	PSS	10-22-19	10:00	Kyle	WyEast	10/24/19	1206
Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time

Wy'East
Environmental Sciences Inc.

2415 SE 11th Ave
Portland, OR 97214
Ph: 503-231-9320
Fax: 503-231-9344

Sample Condition Check List

Customer Name: P.S.S **COC #:** 90812

Method of Delivery: courier (client) other

Type of ice: Ice (Blue) None **Cooler Temperature:** 4.0°C

Matrix: Soil (Water) Other

	Yes	No	NA	Comments
Relinquish signed on Chain of Custody.	✓			*
Received by signed on Chain of Custody.	✓			*
Chain of Custody filled out.	✓			*
Were samples Arrived within Hold Time.	✓			*
Rush Trun Around Time Requested. *If yes, how many days* 1	✓			* 6x Next Day
Temperatures measured and written in correct place on COC.	✓			*
Correct containers used.	✓			*
Sufficient Volume.	✓			*
ID on COC and Sample labels match.	✓			*
Duplicate jars and vials labeled with a, b, c, d etc.	✓			*
All tests logged in checked against the COC.	✓			*
The COC scanned into the main office computer.	✓			*

FOR WATER SAMPLES:

Trip Blank: Yes Waiver on file Submitted by:
No

	Yes	No	Comments
Was sufficient volume provided for analysis.	✓		*
Was sufficient volume provided for QC samples (at least two).	✓		*
HCL Preserved vials.	✓		*
HCL LOT Number: BB337CVB5, B17348CVB5			
Were duplicate jars and vials labeled with a, b, c, d etc.	✓		*
Headspace in VOA Vials (>6mm).		✓	*

Client Notification/Resolution:

Comments:

Reviewed: Kyle **Date:** 10/22/19

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Friday, November 8, 2019

Gil Cobb
Point Source Solutions, LLC
10445 SW Canyon Road Suite 115
Beaverton, OR 97005

RE: A9J0847 - Arcoa Building - OR190501-3

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A9J0847, which was received by the laboratory on 10/23/2019 at 11:52:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: KFriscia@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample reciept, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	3.2	degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW1	A9J0847-01	Water	10/22/19 07:50	10/23/19 11:52
MW2	A9J0847-02	Water	10/22/19 08:00	10/23/19 11:52
MW3	A9J0847-03	Water	10/22/19 08:50	10/23/19 11:52
MW4	A9J0847-04	Water	10/22/19 06:55	10/23/19 11:52
MW5	A9J0847-05	Water	10/22/19 06:45	10/23/19 11:52

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1 (A9J0847-01)				**Matrix: Water**		**Batch: 9101472**		
Acetone	ND	---	20.0	ug/L	1	10/23/19 22:15	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	10/23/19 22:15	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	10/23/19 22:15	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	10/23/19 22:15	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	10/23/19 22:15	EPA 8260C	
Carbon tetrachloride	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Chloroform	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	10/23/19 22:15	EPA 8260C	Q-30
2-Chlorotoluene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1 (A9J0847-01)				**Matrix: Water**		**Batch: 9101472**		
Ethylbenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	10/23/19 22:15	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	10/23/19 22:15	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	10/23/19 22:15	EPA 8260C	Q-30
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	10/23/19 22:15	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	10/23/19 22:15	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Tetrachloroethene (PCE)	**0.550**	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
Vinyl chloride	ND	---	0.400	ug/L	1	10/23/19 22:15	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	10/23/19 22:15	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	10/23/19 22:15	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*	*1*	*10/23/19 22:15*	*EPA 8260C*	
Toluene-d8 (Surr)			*98 %*		*80-120 %*	*1*	*10/23/19 22:15*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*	*1*	*10/23/19 22:15*	*EPA 8260C*	
MW2 (A9J0847-02)				**Matrix: Water**		**Batch: 9101472**		
Acetone	ND	---	20.0	ug/L	1	10/23/19 22:42	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	10/23/19 22:42	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW2 (A9J0847-02)				**Matrix: Water**		**Batch: 9101472**		
Bromoform	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	10/23/19 22:42	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	10/23/19 22:42	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	10/23/19 22:42	EPA 8260C	
Carbon tetrachloride	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Chloroform	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	10/23/19 22:42	EPA 8260C	Q-30
2-Chlorotoluene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	10/23/19 22:42	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	10/23/19 22:42	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	10/23/19 22:42	EPA 8260C	Q-30

Apex Laboratories

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW2 (A9J0847-02)				**Matrix: Water**		**Batch: 9101472**		
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	10/23/19 22:42	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	10/23/19 22:42	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Tetrachloroethene (PCE)	**0.550**	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
Vinyl chloride	ND	---	0.400	ug/L	1	10/23/19 22:42	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	10/23/19 22:42	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	10/23/19 22:42	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits:*	*80-120 %*	*1*	*10/23/19 22:42*	*EPA 8260C*	
Toluene-d8 (Surr)			*98 %*		*80-120 %*	*1*	*10/23/19 22:42*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*	*1*	*10/23/19 22:42*	*EPA 8260C*	
MW3 (A9J0847-03)				**Matrix: Water**		**Batch: 9101472**		
Acetone	ND	---	20.0	ug/L	1	10/24/19 00:30	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	10/24/19 00:30	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	10/24/19 00:30	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	10/24/19 00:30	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW3 (A9J0847-03)				**Matrix: Water**		**Batch: 9101472**		
Carbon disulfide	ND	---	10.0	ug/L	1	10/24/19 00:30	EPA 8260C	
Carbon tetrachloride	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Chloroform	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	10/24/19 00:30	EPA 8260C	Q-30
2-Chlorotoluene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	10/24/19 00:30	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	10/24/19 00:30	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	10/24/19 00:30	EPA 8260C	Q-30
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	10/24/19 00:30	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	10/24/19 00:30	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW3 (A9J0847-03)				**Matrix: Water**		**Batch: 9101472**		
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Tetrachloroethene (PCE)	**0.570**	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
Vinyl chloride	ND	---	0.400	ug/L	1	10/24/19 00:30	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	10/24/19 00:30	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	10/24/19 00:30	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits: 80-120 %*	*1*	*10/24/19 00:30*	*EPA 8260C*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*10/24/19 00:30*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*10/24/19 00:30*	*EPA 8260C*	
MW4 (A9J0847-04)				**Matrix: Water**		**Batch: 9101532**		
Acetone	ND	---	20.0	ug/L	1	10/24/19 16:33	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	10/24/19 16:33	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	10/24/19 16:33	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	10/24/19 16:33	EPA 8260C	
n-Butylbenzene	**1.90**	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
sec-Butylbenzene	**11.4**	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
tert-Butylbenzene	**1.14**	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	10/24/19 16:33	EPA 8260C	
Carbon tetrachloride	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Chloroform	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	10/24/19 16:33	EPA 8260C	

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Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4 (A9J0847-04)				**Matrix: Water**		**Batch: 9101532**		
2-Chlorotoluene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
cis-1,2-Dichloroethene	**0.620**	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Ethylbenzene	**0.770**	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	10/24/19 16:33	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	10/24/19 16:33	EPA 8260C	
Isopropylbenzene	**6.05**	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	10/24/19 16:33	EPA 8260C	Q-30
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	10/24/19 16:33	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	10/24/19 16:33	EPA 8260C	
n-Propylbenzene	**7.73**	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4 (A9J0847-04)				**Matrix: Water**		**Batch: 9101532**		
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,2,4-Trimethylbenzene	**10.6**	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
1,3,5-Trimethylbenzene	**1.80**	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
Vinyl chloride	**0.550**	---	0.400	ug/L	1	10/24/19 16:33	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	10/24/19 16:33	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	10/24/19 16:33	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits:*	*80-120 %*	*1*	*10/24/19 16:33*	*EPA 8260C*	
Toluene-d8 (Surr)			*95 %*		*80-120 %*	*1*	*10/24/19 16:33*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*104 %*		*80-120 %*	*1*	*10/24/19 16:33*	*EPA 8260C*	
MW5 (A9J0847-05)				**Matrix: Water**		**Batch: 9101532**		
Acetone	ND	---	20.0	ug/L	1	10/24/19 16:06	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	10/24/19 16:06	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	10/24/19 16:06	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	10/24/19 16:06	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	10/24/19 16:06	EPA 8260C	
Carbon tetrachloride	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Chloroform	**2.76**	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	10/24/19 16:06	EPA 8260C	
2-Chlorotoluene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5 (A9J0847-05)				**Matrix: Water**		**Batch: 9101532**		
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2-Dichloropropane	**0.890**	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	10/24/19 16:06	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	10/24/19 16:06	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	10/24/19 16:06	EPA 8260C	Q-30
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	10/24/19 16:06	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	10/24/19 16:06	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Tetrachloroethene (PCE)	**0.940**	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Trichloroethene (TCE)	**0.760**	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5 (A9J0847-05)				**Matrix: Water**		**Batch: 9101532**		
Vinyl chloride	ND	---	0.400	ug/L	1	10/24/19 16:06	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	10/24/19 16:06	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	10/24/19 16:06	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:* *80-120 %*	*1*	*10/24/19 16:06*	*EPA 8260C*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*10/24/19 16:06*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*10/24/19 16:06*	*EPA 8260C*	

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B							**Water**					
Blank (9101472-BLK1)		Prepared: 10/23/19 10:00		Analyzed: 10/23/19 14:37								
EPA 8260C												
Acetone	ND	---	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B							**Water**					
Blank (9101472-BLK1)		Prepared: 10/23/19 10:00		Analyzed: 10/23/19 14:37								
1,2-Dichloropropane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	---	10.0	ug/L	1	---	---	---	---	---	---	Q-30
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 106 %*		*Limits: 80-120 %*				*Dilution: 1x*				

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Kevin J. Friscia, Project Manager

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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B									Water			
Blank (9101472-BLK1)			Prepared: 10/23/19 10:00		Analyzed: 10/23/19 14:37							
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*			*"*				
LCS (9101472-BS1)			Prepared: 10/23/19 10:00		Analyzed: 10/23/19 13:35							
EPA 8260C												
Acetone	30.2	---	20.0	ug/L	1	40.0	---	**76**	**80 - 120%**	---	---	Q-55
Acrylonitrile	15.4	---	2.00	ug/L	1	20.0	---	**77**	**80 - 120%**	---	---	Q-55
Benzene	18.2	---	0.200	ug/L	1	20.0	---	91	80 - 120%	---	---	
Bromobenzene	20.0	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Bromochloromethane	17.9	---	1.00	ug/L	1	20.0	---	90	80 - 120%	---	---	
Bromodichloromethane	23.1	---	1.00	ug/L	1	20.0	---	116	80 - 120%	---	---	
Bromoform	25.7	---	1.00	ug/L	1	20.0	---	**129**	**80 - 120%**	---	---	Q-56
Bromomethane	20.2	---	5.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
2-Butanone (MEK)	35.1	---	10.0	ug/L	1	40.0	---	88	80 - 120%	---	---	
n-Butylbenzene	20.3	---	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
sec-Butylbenzene	19.6	---	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
tert-Butylbenzene	18.4	---	1.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
Carbon disulfide	19.7	---	10.0	ug/L	1	20.0	---	99	80 - 120%	---	---	
Carbon tetrachloride	30.6	---	1.00	ug/L	1	20.0	---	**153**	**80 - 120%**	---	---	Q-56
Chlorobenzene	19.0	---	0.500	ug/L	1	20.0	---	95	80 - 120%	---	---	
Chloroethane	20.1	---	5.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
Chloroform	18.9	---	1.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
Chloromethane	15.1	---	5.00	ug/L	1	20.0	---	**75**	**80 - 120%**	---	---	Q-55
2-Chlorotoluene	19.7	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	
4-Chlorotoluene	18.8	---	1.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
Dibromochloromethane	23.0	---	1.00	ug/L	1	20.0	---	115	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	23.8	---	5.00	ug/L	1	20.0	---	119	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	19.8	---	0.500	ug/L	1	20.0	---	99	80 - 120%	---	---	
Dibromomethane	20.8	---	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,2-Dichlorobenzene	20.4	---	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,3-Dichlorobenzene	20.4	---	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,4-Dichlorobenzene	19.0	---	0.500	ug/L	1	20.0	---	95	80 - 120%	---	---	
Dichlorodifluoromethane	18.7	---	1.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
1,1-Dichloroethane	18.4	---	0.400	ug/L	1	20.0	---	92	80 - 120%	---	---	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B							**Water**					
LCS (9101472-BS1)		Prepared: 10/23/19 10:00		Analyzed: 10/23/19 13:35								
1,2-Dichloroethane (EDC)	18.6	---	0.400	ug/L	1	20.0	---	93	80 - 120%	---	---	
1,1-Dichloroethene	16.5	---	0.400	ug/L	1	20.0	---	83	80 - 120%	---	---	
cis-1,2-Dichloroethene	17.6	---	0.400	ug/L	1	20.0	---	88	80 - 120%	---	---	
trans-1,2-Dichloroethene	17.9	---	0.400	ug/L	1	20.0	---	90	80 - 120%	---	---	
1,2-Dichloropropane	17.6	---	0.500	ug/L	1	20.0	---	88	80 - 120%	---	---	
1,3-Dichloropropane	18.7	---	1.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
2,2-Dichloropropane	29.2	---	1.00	ug/L	1	20.0	---	**146**	**80 - 120%**	---	---	Q-56
1,1-Dichloropropene	19.3	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
cis-1,3-Dichloropropene	20.7	---	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
trans-1,3-Dichloropropene	21.6	---	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
Ethylbenzene	19.0	---	0.500	ug/L	1	20.0	---	95	80 - 120%	---	---	
Hexachlorobutadiene	21.9	---	5.00	ug/L	1	20.0	---	110	80 - 120%	---	---	
2-Hexanone	34.7	---	10.0	ug/L	1	40.0	---	87	80 - 120%	---	---	
Isopropylbenzene	20.7	---	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
4-Isopropyltoluene	20.4	---	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
Methylene chloride	ND	---	10.0	ug/L	1	20.0	---	**42**	**80 - 120%**	---	---	Q-55
4-Methyl-2-pentanone (MiBK)	36.4	---	10.0	ug/L	1	40.0	---	91	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	20.6	---	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
Naphthalene	17.9	---	2.00	ug/L	1	20.0	---	90	80 - 120%	---	---	
n-Propylbenzene	18.6	---	0.500	ug/L	1	20.0	---	93	80 - 120%	---	---	
Styrene	20.5	---	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	23.6	---	0.400	ug/L	1	20.0	---	118	80 - 120%	---	---	
1,1,2,2-Tetrachloroethane	19.2	---	0.500	ug/L	1	20.0	---	96	80 - 120%	---	---	
Tetrachloroethene (PCE)	20.4	---	0.400	ug/L	1	20.0	---	102	80 - 120%	---	---	
Toluene	17.9	---	1.00	ug/L	1	20.0	---	90	80 - 120%	---	---	
1,2,3-Trichlorobenzene	20.8	---	2.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,2,4-Trichlorobenzene	20.0	---	2.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,1,1-Trichloroethane	23.5	---	0.400	ug/L	1	20.0	---	118	80 - 120%	---	---	
1,1,2-Trichloroethane	19.2	---	0.500	ug/L	1	20.0	---	96	80 - 120%	---	---	
Trichloroethene (TCE)	19.1	---	0.400	ug/L	1	20.0	---	96	80 - 120%	---	---	
Trichlorofluoromethane	19.1	---	2.00	ug/L	1	20.0	---	95	80 - 120%	---	---	
1,2,3-Trichloropropane	19.1	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
1,2,4-Trimethylbenzene	20.9	---	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,3,5-Trimethylbenzene	20.4	---	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B							**Water**					
LCS (9101472-BS1)		Prepared: 10/23/19 10:00		Analyzed: 10/23/19 13:35								
Vinyl chloride	16.5	---	0.400	ug/L	1	20.0	---	82	80 - 120%	---	---	
m,p-Xylene	40.0	---	1.00	ug/L	1	40.0	---	100	80 - 120%	---	---	
o-Xylene	19.7	---	0.500	ug/L	1	20.0	---	98	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*97 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*101 %*		*80-120 %*			*"*					
Matrix Spike (9101472-MS1)		Prepared: 10/23/19 15:14		Analyzed: 10/24/19 00:57								
QC Source Sample: MW3 (A9J0847-03)												
EPA 8260C												
Acetone	34.5	---	20.0	ug/L	1	40.0	ND	86	39 - 160%	---	---	Q-54k
Acrylonitrile	16.4	---	2.00	ug/L	1	20.0	ND	82	63 - 135%	---	---	Q-54h
Benzene	19.7	---	0.200	ug/L	1	20.0	ND	98	79 - 120%	---	---	
Bromobenzene	20.1	---	0.500	ug/L	1	20.0	ND	100	80 - 120%	---	---	
Bromochloromethane	19.6	---	1.00	ug/L	1	20.0	ND	98	78 - 123%	---	---	
Bromodichloromethane	24.1	---	1.00	ug/L	1	20.0	ND	120	79 - 125%	---	---	
Bromoform	26.0	---	1.00	ug/L	1	20.0	ND	130	66 - 130%	---	---	Q-54g
Bromomethane	22.6	---	5.00	ug/L	1	20.0	ND	113	53 - 141%	---	---	
2-Butanone (MEK)	37.2	---	10.0	ug/L	1	40.0	ND	93	56 - 143%	---	---	
n-Butylbenzene	19.2	---	1.00	ug/L	1	20.0	ND	96	75 - 128%	---	---	
sec-Butylbenzene	19.8	---	1.00	ug/L	1	20.0	ND	99	77 - 126%	---	---	
tert-Butylbenzene	19.4	---	1.00	ug/L	1	20.0	ND	97	78 - 124%	---	---	
Carbon disulfide	21.0	---	10.0	ug/L	1	20.0	ND	105	64 - 133%	---	---	
Carbon tetrachloride	33.0	---	1.00	ug/L	1	20.0	ND	**165**	**72 - 136%**	---	---	Q-54c
Chlorobenzene	19.8	---	0.500	ug/L	1	20.0	ND	99	80 - 120%	---	---	
Chloroethane	25.0	---	5.00	ug/L	1	20.0	ND	125	60 - 138%	---	---	
Chloroform	21.1	---	1.00	ug/L	1	20.0	0.970	100	79 - 124%	---	---	
Chloromethane	17.4	---	5.00	ug/L	1	20.0	ND	87	50 - 139%	---	---	Q-54l
2-Chlorotoluene	19.9	---	1.00	ug/L	1	20.0	ND	100	79 - 122%	---	---	
4-Chlorotoluene	19.4	---	1.00	ug/L	1	20.0	ND	97	78 - 122%	---	---	
Dibromochloromethane	23.4	---	1.00	ug/L	1	20.0	ND	117	74 - 126%	---	---	
1,2-Dibromo-3-chloropropane	23.5	---	5.00	ug/L	1	20.0	ND	118	62 - 128%	---	---	
1,2-Dibromoethane (EDB)	20.5	---	0.500	ug/L	1	20.0	ND	102	77 - 121%	---	---	
Dibromomethane	21.6	---	1.00	ug/L	1	20.0	ND	108	79 - 123%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B							**Water**					
Matrix Spike (9101472-MS1)		Prepared: 10/23/19 15:14		Analyzed: 10/24/19 00:57								
QC Source Sample: MW3 (A9J0847-03)												
1,2-Dichlorobenzene	20.6	---	0.500	ug/L	1	20.0	ND	103	80 - 120%	---	---	
1,3-Dichlorobenzene	20.6	---	0.500	ug/L	1	20.0	ND	103	80 - 120%	---	---	
1,4-Dichlorobenzene	18.7	---	0.500	ug/L	1	20.0	ND	94	79 - 120%	---	---	
Dichlorodifluoromethane	19.9	---	1.00	ug/L	1	20.0	ND	99	32 - 152%	---	---	
1,1-Dichloroethane	19.7	---	0.400	ug/L	1	20.0	ND	99	77 - 125%	---	---	
1,2-Dichloroethane (EDC)	19.2	---	0.400	ug/L	1	20.0	ND	96	73 - 128%	---	---	
1,1-Dichloroethene	17.9	---	0.400	ug/L	1	20.0	ND	89	71 - 131%	---	---	
cis-1,2-Dichloroethene	18.9	---	0.400	ug/L	1	20.0	ND	95	78 - 123%	---	---	
trans-1,2-Dichloroethene	19.3	---	0.400	ug/L	1	20.0	ND	96	75 - 124%	---	---	
1,2-Dichloropropane	18.8	---	0.500	ug/L	1	20.0	ND	94	78 - 122%	---	---	
1,3-Dichloropropane	19.2	---	1.00	ug/L	1	20.0	ND	96	80 - 120%	---	---	
2,2-Dichloropropane	25.7	---	1.00	ug/L	1	20.0	ND	128	60 - 139%	---	---	Q-54a
1,1-Dichloropropene	20.5	---	1.00	ug/L	1	20.0	ND	102	79 - 125%	---	---	
cis-1,3-Dichloropropene	19.3	---	1.00	ug/L	1	20.0	ND	96	75 - 124%	---	---	
trans-1,3-Dichloropropene	21.5	---	1.00	ug/L	1	20.0	ND	108	73 - 127%	---	---	
Ethylbenzene	19.9	---	0.500	ug/L	1	20.0	ND	100	79 - 121%	---	---	
Hexachlorobutadiene	19.9	---	5.00	ug/L	1	20.0	ND	100	66 - 134%	---	---	
2-Hexanone	37.7	---	10.0	ug/L	1	40.0	ND	94	57 - 139%	---	---	
Isopropylbenzene	21.6	---	1.00	ug/L	1	20.0	ND	108	72 - 131%	---	---	
4-Isopropyltoluene	20.3	---	1.00	ug/L	1	20.0	ND	102	77 - 127%	---	---	
Methylene chloride	ND	---	10.0	ug/L	1	20.0	ND	**42**	**74 - 124%**	---	---	Q-54j
4-Methyl-2-pentanone (MiBK)	38.7	---	10.0	ug/L	1	40.0	ND	97	67 - 130%	---	---	
Methyl tert-butyl ether (MTBE)	21.3	---	1.00	ug/L	1	20.0	ND	106	71 - 124%	---	---	
Naphthalene	18.0	---	2.00	ug/L	1	20.0	ND	90	61 - 128%	---	---	
n-Propylbenzene	18.9	---	0.500	ug/L	1	20.0	ND	95	76 - 126%	---	---	
Styrene	21.2	---	1.00	ug/L	1	20.0	ND	106	78 - 123%	---	---	
1,1,1,2-Tetrachloroethane	24.8	---	0.400	ug/L	1	20.0	ND	124	78 - 124%	---	---	
1,1,2,2-Tetrachloroethane	20.2	---	0.500	ug/L	1	20.0	ND	101	71 - 121%	---	---	
Tetrachloroethene (PCE)	21.1	---	0.400	ug/L	1	20.0	0.570	103	74 - 129%	---	---	
Toluene	18.9	---	1.00	ug/L	1	20.0	ND	95	80 - 121%	---	---	
1,2,3-Trichlorobenzene	20.1	---	2.00	ug/L	1	20.0	ND	100	69 - 129%	---	---	
1,2,4-Trichlorobenzene	19.1	---	2.00	ug/L	1	20.0	ND	96	69 - 130%	---	---	
1,1,1-Trichloroethane	25.4	---	0.400	ug/L	1	20.0	ND	127	74 - 131%	---	---	

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101472 - EPA 5030B							**Water**					
Matrix Spike (9101472-MS1)		Prepared: 10/23/19 15:14		Analyzed: 10/24/19 00:57								
QC Source Sample: MW3 (A9J0847-03)												
1,1,2-Trichloroethane	20.1	---	0.500	ug/L	1	20.0	ND	101	80 - 120%	---	---	
Trichloroethene (TCE)	19.9	---	0.400	ug/L	1	20.0	0.220	98	79 - 123%	---	---	
Trichlorofluoromethane	20.6	---	2.00	ug/L	1	20.0	ND	103	65 - 141%	---	---	
1,2,3-Trichloropropane	19.9	---	1.00	ug/L	1	20.0	ND	99	73 - 122%	---	---	
1,2,4-Trimethylbenzene	21.1	---	1.00	ug/L	1	20.0	ND	106	76 - 124%	---	---	
1,3,5-Trimethylbenzene	20.8	---	1.00	ug/L	1	20.0	ND	104	75 - 124%	---	---	
Vinyl chloride	18.8	---	0.400	ug/L	1	20.0	ND	94	58 - 137%	---	---	
m,p-Xylene	41.8	---	1.00	ug/L	1	40.0	ND	104	80 - 121%	---	---	
o-Xylene	20.9	---	0.500	ug/L	1	20.0	ND	104	78 - 122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*96 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*100 %*		*80-120 %*			*"*					

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101532 - EPA 5030B							**Water**					
Blank (9101532-BLK1)		Prepared: 10/24/19 09:00		Analyzed: 10/24/19 11:09								
EPA 8260C												
Acetone	ND	---	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101532 - EPA 5030B							**Water**					
Blank (9101532-BLK1)		Prepared: 10/24/19 09:00		Analyzed: 10/24/19 11:09								
1,2-Dichloropropane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	---	10.0	ug/L	1	---	---	---	---	---	---	Q-30
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 105 %*		*Limits: 80-120 %*					*Dilution: 1x*			

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Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101532 - EPA 5030B									Water			
Blank (9101532-BLK1)			Prepared: 10/24/19 09:00 Analyzed: 10/24/19 11:09									
Surr: Toluene-d8 (Surr)			*Recovery: 97 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*				*"*				
LCS (9101532-BS1)			Prepared: 10/24/19 09:00 Analyzed: 10/24/19 10:15									
EPA 8260C												
Acetone	32.2	---	20.0	ug/L	1	40.0	---	80	80 - 120%	---	---	
Acrylonitrile	16.3	---	2.00	ug/L	1	20.0	---	81	80 - 120%	---	---	
Benzene	19.1	---	0.200	ug/L	1	20.0	---	96	80 - 120%	---	---	
Bromobenzene	20.6	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Bromochloromethane	18.5	---	1.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
Bromodichloromethane	23.8	---	1.00	ug/L	1	20.0	---	119	80 - 120%	---	---	
Bromoform	26.5	---	1.00	ug/L	1	20.0	---	**132**	**80 - 120%**	---	---	Q-56
Bromomethane	21.5	---	5.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
2-Butanone (MEK)	36.2	---	10.0	ug/L	1	40.0	---	91	80 - 120%	---	---	
n-Butylbenzene	20.2	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
sec-Butylbenzene	20.0	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
tert-Butylbenzene	19.2	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Carbon disulfide	20.2	---	10.0	ug/L	1	20.0	---	101	80 - 120%	---	---	
Carbon tetrachloride	32.3	---	1.00	ug/L	1	20.0	---	**162**	**80 - 120%**	---	---	Q-56
Chlorobenzene	19.8	---	0.500	ug/L	1	20.0	---	99	80 - 120%	---	---	
Chloroethane	21.4	---	5.00	ug/L	1	20.0	---	107	80 - 120%	---	---	
Chloroform	19.7	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	
Chloromethane	15.4	---	5.00	ug/L	1	20.0	---	**77**	**80 - 120%**	---	---	Q-55
2-Chlorotoluene	20.1	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
4-Chlorotoluene	19.3	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Dibromochloromethane	24.0	---	1.00	ug/L	1	20.0	---	120	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	24.7	---	5.00	ug/L	1	20.0	---	**123**	**80 - 120%**	---	---	Q-56
1,2-Dibromoethane (EDB)	20.5	---	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
Dibromomethane	21.6	---	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
1,2-Dichlorobenzene	20.9	---	0.500	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,3-Dichlorobenzene	20.8	---	0.500	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,4-Dichlorobenzene	19.4	---	0.500	ug/L	1	20.0	---	97	80 - 120%	---	---	
Dichlorodifluoromethane	18.1	---	1.00	ug/L	1	20.0	---	91	80 - 120%	---	---	
1,1-Dichloroethane	19.3	---	0.400	ug/L	1	20.0	---	97	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101532 - EPA 5030B							**Water**					
LCS (9101532-BS1)		Prepared: 10/24/19 09:00		Analyzed: 10/24/19 10:15								
1,2-Dichloroethane (EDC)	19.2	---	0.400	ug/L	1	20.0	---	96	80 - 120%	---	---	
1,1-Dichloroethene	17.2	---	0.400	ug/L	1	20.0	---	86	80 - 120%	---	---	
cis-1,2-Dichloroethene	18.4	---	0.400	ug/L	1	20.0	---	92	80 - 120%	---	---	
trans-1,2-Dichloroethene	18.8	---	0.400	ug/L	1	20.0	---	94	80 - 120%	---	---	
1,2-Dichloropropane	18.4	---	0.500	ug/L	1	20.0	---	92	80 - 120%	---	---	
1,3-Dichloropropane	19.4	---	1.00	ug/L	1	20.0	---	97	80 - 120%	---	---	
2,2-Dichloropropane	31.0	---	1.00	ug/L	1	20.0	---	**155**	**80 - 120%**	---	---	Q-56
1,1-Dichloropropene	19.9	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
cis-1,3-Dichloropropene	21.7	---	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
trans-1,3-Dichloropropene	22.4	---	1.00	ug/L	1	20.0	---	112	80 - 120%	---	---	
Ethylbenzene	19.7	---	0.500	ug/L	1	20.0	---	99	80 - 120%	---	---	
Hexachlorobutadiene	21.9	---	5.00	ug/L	1	20.0	---	109	80 - 120%	---	---	
2-Hexanone	36.8	---	10.0	ug/L	1	40.0	---	92	80 - 120%	---	---	
Isopropylbenzene	21.3	---	1.00	ug/L	1	20.0	---	106	80 - 120%	---	---	
4-Isopropyltoluene	20.8	---	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
Methylene chloride	ND	---	10.0	ug/L	1	20.0	---	**44**	**80 - 120%**	---	---	Q-55
4-Methyl-2-pentanone (MiBK)	38.2	---	10.0	ug/L	1	40.0	---	95	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	21.4	---	1.00	ug/L	1	20.0	---	107	80 - 120%	---	---	
Naphthalene	18.4	---	2.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
n-Propylbenzene	19.1	---	0.500	ug/L	1	20.0	---	95	80 - 120%	---	---	
Styrene	21.1	---	1.00	ug/L	1	20.0	---	106	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	25.0	---	0.400	ug/L	1	20.0	---	**125**	**80 - 120%**	---	---	Q-56
1,1,2,2-Tetrachloroethane	20.3	---	0.500	ug/L	1	20.0	---	101	80 - 120%	---	---	
Tetrachloroethene (PCE)	21.0	---	0.400	ug/L	1	20.0	---	105	80 - 120%	---	---	
Toluene	18.8	---	1.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
1,2,3-Trichlorobenzene	21.4	---	2.00	ug/L	1	20.0	---	107	80 - 120%	---	---	
1,2,4-Trichlorobenzene	20.1	---	2.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,1,1-Trichloroethane	24.5	---	0.400	ug/L	1	20.0	---	**123**	**80 - 120%**	---	---	Q-56
1,1,2-Trichloroethane	20.0	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Trichloroethene (TCE)	19.8	---	0.400	ug/L	1	20.0	---	99	80 - 120%	---	---	
Trichlorofluoromethane	19.4	---	2.00	ug/L	1	20.0	---	97	80 - 120%	---	---	
1,2,3-Trichloropropane	20.3	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2,4-Trimethylbenzene	21.6	---	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
1,3,5-Trimethylbenzene	20.9	---	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101532 - EPA 5030B												**Water**
LCS (9101532-BS1)		Prepared: 10/24/19 09:00		Analyzed: 10/24/19 10:15								
Vinyl chloride	17.0	---	0.400	ug/L	1	20.0	---	85	80 - 120%	---	---	
m,p-Xylene	41.3	---	1.00	ug/L	1	40.0	---	103	80 - 120%	---	---	
o-Xylene	20.4	---	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*98 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*100 %*		*80-120 %*			*"*					

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SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9101472							
A9J0847-01	Water	EPA 8260C	10/22/19 07:50	10/23/19 15:14	5mL/5mL	5mL/5mL	1.00
A9J0847-02	Water	EPA 8260C	10/22/19 08:00	10/23/19 15:14	5mL/5mL	5mL/5mL	1.00
A9J0847-03	Water	EPA 8260C	10/22/19 08:50	10/23/19 15:14	5mL/5mL	5mL/5mL	1.00
Batch: 9101532							
A9J0847-04	Water	EPA 8260C	10/22/19 06:55	10/24/19 12:04	5mL/5mL	5mL/5mL	1.00
A9J0847-05	Water	EPA 8260C	10/22/19 06:45	10/24/19 12:04	5mL/5mL	5mL/5mL	1.00

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +26%. The results are reported as Estimated Values.
Q-54c	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +33%. The results are reported as Estimated Values.
Q-54g	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +9%. The results are reported as Estimated Values.
Q-54h	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -3%. The results are reported as Estimated Values.
Q-54j	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -38%. The results are reported as Estimated Values.
Q-54k	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -4%. The results are reported as Estimated Values.
Q-54l	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -5%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260C, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported.

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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LABORATORY ACCREDITATION INFORMATION

TNI Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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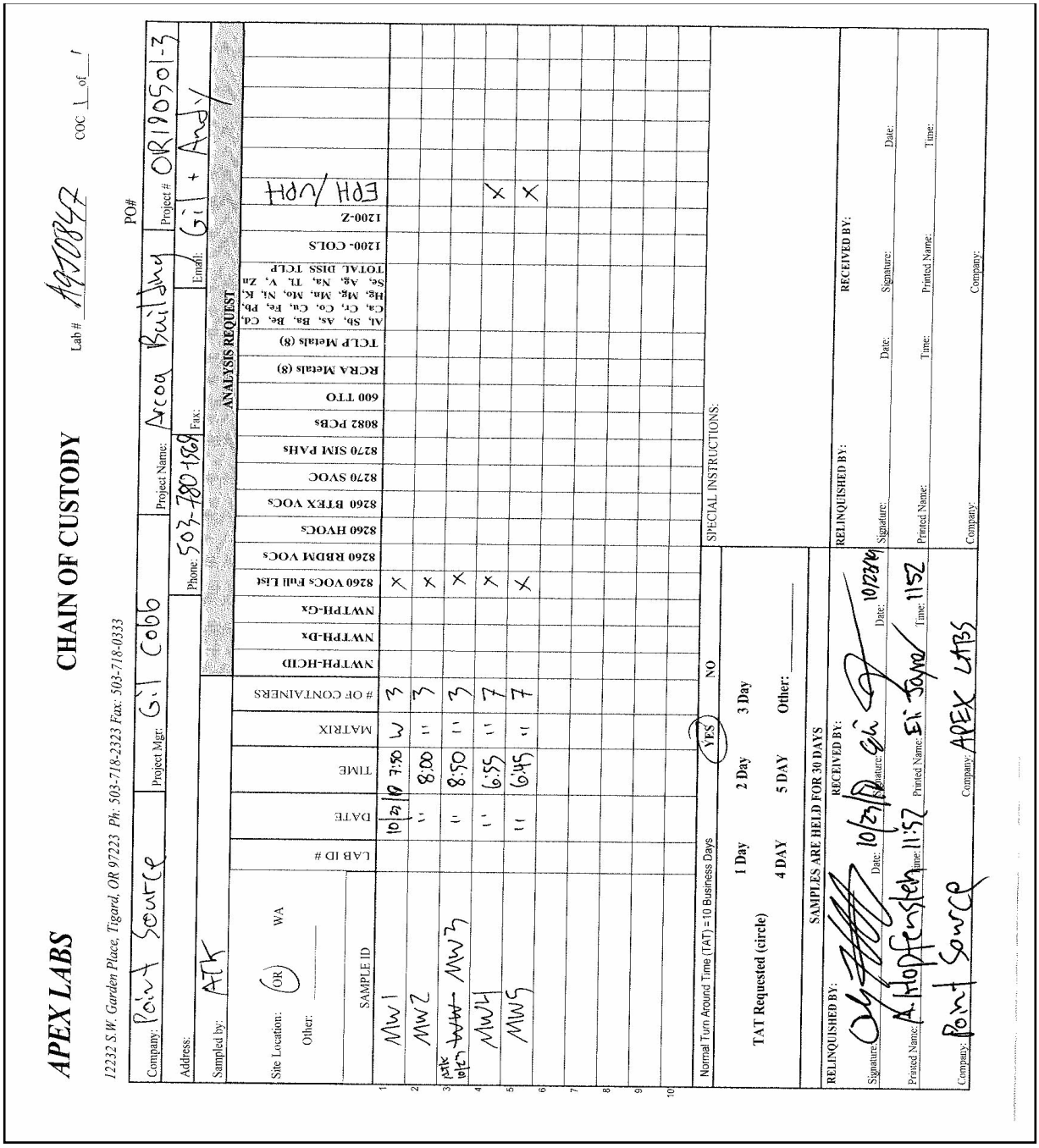

APEX LABS
12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

Lab # A9J0847 COC 1 of 1 PO#

Company: Point Source | Project Mgr: Gil Cobb | Project Name: Arcoa Building | Project #: OR190501-3
Address: | Phone: 503-780-1869 Fax: | Email: Gil + Andy
Sampled by: ATK

Site Location: (OR) WA
Other: _____

#	SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 VOCs Full List	8260 RBDM VOCs	8260 HVOCs	8260 BTEX VOCs	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS TCLP	1200- COLS	1200-Z	EDH / DEQ
1	MW1		10/21/19	7:50	W	3				X												
2	MW2		"	8:00	"	3				X												
3	MW3		"	8:50	"	3				X												
4	MW4		"	6:55	"	7				X												X
5	MW5		"	6:45	"	7				X												X
6																						
7																						
8																						
9																						
10																						

Normal Turn Around Time (TAT) = 10 Business Days (YES) NO

SPECIAL INSTRUCTIONS:

TAT Requested (circle)
1 Day 2 Day 3 Day
4 DAY 5 DAY Other: _____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:
Signature: [signature] Date: 10/23/19
Printed Name: A. Hoffenstein Time: 11:57
Company: Point Source

RECEIVED BY:
Signature: [signature] Date: 10/23/19
Printed Name: Eli Jayne Time: 1152
Company: APEX LABS

RELINQUISHED BY:
Signature: _____ Date: _____
Printed Name: _____ Time: _____
Company: _____

RECEIVED BY:
Signature: _____ Date: _____
Printed Name: _____ Time: _____
Company: _____

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J0847 - 11 08 19 1654**

APEX LABS COOLER RECEIPT FORM

Client: Point Source Element WO#: A9 J0847

Project/Project #: Arcoa Building OR 190501-3

Delivery Info:

Date/time received: 10/23/19 @ 1152 By: EJ

Delivered by: Apex____Client X ESS____FedEx____UPS____Swift___Senvoy ___SDS___Other_____

Cooler Inspection Date/time inspected: 10/23/19 @ 1152 By: EJ

Chain of Custody included? Yes X No ___ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	3.2						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Gel						
Condition:	Good						

Cooler out of temp? (Y(N) Possible reason why:_____

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/(NA)

Out of temperature samples form initiated? Yes/No/(NA)

Samples Inspection: Date/time inspected: 10/23/19 @ 1210 By: MS

All samples intact? Yes X No ___ Comments:_____

Bottle labels/COCs agree? Yes X No ___ Comments: _____

COC/container discrepancies form initiated? Yes ___ No ___ NA X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments_____

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes X No___NA____

Comments: _____

Additional information: _____

Labeled by: MS Witness: EJ Cooler Inspected by: EJ See Project Contact Form: Y

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kevin J. Friscia, Project Manager

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

Apex Laboratories
Kevin Friscia
6700 SW Sandburg St
Tigard, OR 97223

RE: A9J0847
Work Order Number: 1910458

November 08, 2019

Attention Kevin Friscia:

Fremont Analytical, Inc. received 2 sample(s) on 10/25/2019 for the analyses presented in the following report.

Extractable Petroleum Hydrocarbons by NWEPH
Volatile Petroleum Hydrocarbons by NWVPH

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *11/08/2019*

CLIENT: Apex Laboratories
Project: A9J0847
Work Order: 1910458

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1910458-001	MW4	10/22/2019 6:55 AM	10/25/2019 9:29 AM
1910458-002	MW5	10/22/2019 6:45 AM	10/25/2019 9:29 AM

Case Narrative

WO#: **1910458**
Date: **11/8/2019**

CLIENT: Apex Laboratories
Project: A9J0847

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: Apex Laboratories **Collection Date:** 10/22/2019 6:55:00 AM
Project: A9J0847
Lab ID: 1910458-001 **Matrix:**
Client Sample ID: MW4

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 26341		Analyst: DW
Aliphatic Hydrocarbon (C10-C12)	ND	19.9		µg/L	1	11/5/2019 5:20:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	19.9		µg/L	1	11/5/2019 5:20:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	19.9		µg/L	1	11/5/2019 5:20:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	19.9		µg/L	1	11/5/2019 5:20:00 PM
Aliphatic Hydrocarbon (C8-C10)	ND	39.8	*	µg/L	1	11/5/2019 5:20:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	19.9		µg/L	1	11/6/2019 5:41:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	19.9		µg/L	1	11/6/2019 5:41:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	19.9		µg/L	1	11/6/2019 5:41:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	19.9	*	µg/L	1	11/6/2019 5:41:00 AM
Aromatic Hydrocarbon (C8-C10)	ND	19.9		µg/L	1	11/6/2019 5:41:00 AM
Surr: 1-Chlorooctadecane	54.6	60 - 140	S	%Rec	1	11/5/2019 5:20:00 PM
Surr: o-Terphenyl	80.6	60 - 140		%Rec	1	11/6/2019 5:41:00 AM

NOTES:
* - Flagged value is not within established control limits.
S - Outlying surrogate recovery(ies) observed.

Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 26325		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	40.0		µg/L	1	10/30/2019 6:33:15 PM
Aliphatic Hydrocarbon (C6-C8)	49.9	20.0		µg/L	1	10/30/2019 6:33:15 PM
Aliphatic Hydrocarbon (C8-C10)	103	20.0		µg/L	1	10/30/2019 6:33:15 PM
Aliphatic Hydrocarbon (C10-C12)	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
Aromatic Hydrocarbon (C8-C10)	116	50.0		µg/L	1	10/30/2019 6:33:15 PM
Aromatic Hydrocarbon (C10-C12)	292	20.0		µg/L	1	10/30/2019 6:33:15 PM
Aromatic Hydrocarbon (C12-C13)	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
Benzene	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
Toluene	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
Ethylbenzene	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
m,p-Xylene	ND	40.0		µg/L	1	10/30/2019 6:33:15 PM
o-Xylene	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
Naphthalene	ND	20.0		µg/L	1	10/30/2019 6:33:15 PM
Methyl tert-butyl ether (MTBE)	ND	20.0	Q	µg/L	1	10/30/2019 6:33:15 PM
Surr: 1,4-Difluorobenzene	98.0	65 - 140		%Rec	1	10/30/2019 6:33:15 PM
Surr: Bromofluorobenzene	109	65 - 140		%Rec	1	10/30/2019 6:33:15 PM

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

Client: Apex Laboratories **Collection Date:** 10/22/2019 6:45:00 AM
Project: A9J0847
Lab ID: 1910458-002 **Matrix:**
Client Sample ID: MW5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 26341		Analyst: DW
Aliphatic Hydrocarbon (C10-C12)	ND	19.8		µg/L	1	11/5/2019 6:04:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	19.8		µg/L	1	11/5/2019 6:04:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	19.8		µg/L	1	11/5/2019 6:04:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	19.8		µg/L	1	11/5/2019 6:04:00 PM
Aliphatic Hydrocarbon (C8-C10)	ND	39.6	*	µg/L	1	11/5/2019 6:04:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	19.8		µg/L	1	11/6/2019 6:25:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	19.8		µg/L	1	11/6/2019 6:25:00 AM
Aromatic Hydrocarbon (C16-C21)	ND	19.8		µg/L	1	11/6/2019 6:25:00 AM
Aromatic Hydrocarbon (C21-C34)	ND	19.8	*	µg/L	1	11/6/2019 6:25:00 AM
Aromatic Hydrocarbon (C8-C10)	ND	19.8		µg/L	1	11/6/2019 6:25:00 AM
Surr: 1-Chlorooctadecane	76.6	60 - 140		%Rec	1	11/5/2019 6:04:00 PM
Surr: o-Terphenyl	89.0	60 - 140		%Rec	1	11/6/2019 6:25:00 AM

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

Volatile Petroleum Hydrocarbons by NWVPH				Batch ID: 26325		Analyst: CR
Aliphatic Hydrocarbon (C5-C6)	ND	40.0		µg/L	1	10/30/2019 7:14:25 PM
Aliphatic Hydrocarbon (C6-C8)	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Aliphatic Hydrocarbon (C8-C10)	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Aliphatic Hydrocarbon (C10-C12)	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Aromatic Hydrocarbon (C8-C10)	ND	50.0		µg/L	1	10/30/2019 7:14:25 PM
Aromatic Hydrocarbon (C10-C12)	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Aromatic Hydrocarbon (C12-C13)	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Benzene	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Toluene	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Ethylbenzene	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
m,p-Xylene	ND	40.0		µg/L	1	10/30/2019 7:14:25 PM
o-Xylene	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Naphthalene	ND	20.0		µg/L	1	10/30/2019 7:14:25 PM
Methyl tert-butyl ether (MTBE)	ND	20.0	Q	µg/L	1	10/30/2019 7:14:25 PM
Surr: 1,4-Difluorobenzene	99.2	65 - 140		%Rec	1	10/30/2019 7:14:25 PM
Surr: Bromofluorobenzene	106	65 - 140		%Rec	1	10/30/2019 7:14:25 PM

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

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **MB-26341** SampType: **MBLK** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **MBLKW** Batch ID: **26341** Analysis Date: **11/5/2019** SeqNo: **1094721**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	ND	19.9		0	0						
Aliphatic Hydrocarbon (C12-C16)	ND	19.9		0	0						
Aliphatic Hydrocarbon (C16-C21)	ND	19.9		0	0						
Aliphatic Hydrocarbon (C21-C34)	ND	19.9		0	0						
Aliphatic Hydrocarbon (C8-C10)	ND	39.9		0	0						*
Surr: 1-Chlorooctadecane	1,350		1,993		67.7	60	140				

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

Sample ID: **LCS-26341** SampType: **LCS** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **LCSW** Batch ID: **26341** Analysis Date: **11/5/2019** SeqNo: **1094720**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	1,790	19.9	2,487	0	72.1	70	130				
Aliphatic Hydrocarbon (C12-C16)	2,320	19.9	2,487	0	93.3	70	130				
Aliphatic Hydrocarbon (C16-C21)	2,310	19.9	2,487	0	93.0	70	130				
Aliphatic Hydrocarbon (C21-C34)	2,040	19.9	2,487	0	81.9	70	130				
Aliphatic Hydrocarbon (C8-C10)	1,960	39.8	4,975	0	39.4	70	130				S
Surr: 1-Chlorooctadecane	1,490		1,990		74.9	60	140				

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

Sample ID: **1910514-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/5/2019** SeqNo: **1094719**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	ND	20.0		0	0			0		25	
Aliphatic Hydrocarbon (C12-C16)	ND	20.0		0	0			0		25	
Aliphatic Hydrocarbon (C16-C21)	ND	20.0		0	0			0		25	
Aliphatic Hydrocarbon (C21-C34)	ND	20.0		0	0			0		25	
Aliphatic Hydrocarbon (C8-C10)	ND	40.0		0	0			0		25	*
Surr: 1-Chlorooctadecane	1,370		2,001		68.7	60	140		0		

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **1910514-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/5/2019** SeqNo: **1094719**

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

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

Sample ID: **1910514-002BMS** SampType: **MS** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/5/2019** SeqNo: **1094722**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	1,780	20.0	2,497	0	71.3	70	130				
Aliphatic Hydrocarbon (C12-C16)	2,360	20.0	2,497	0	94.4	70	130				
Aliphatic Hydrocarbon (C16-C21)	2,370	20.0	2,497	0	94.8	70	130				
Aliphatic Hydrocarbon (C21-C34)	2,250	20.0	2,497	0	90.1	70	130				
Aliphatic Hydrocarbon (C8-C10)	1,580	40.0	4,995	0	31.7	70	130				S
Surr: 1-Chlorooctadecane	1,320		1,998		66.3	60	140				

NOTES:
S - Outlying spike recovery observed (low bias).

Sample ID: **1910514-002BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/5/2019** SeqNo: **1094723**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	1,620	20.0	2,504	0	64.6	70	130	1,780	9.50	30	S
Aliphatic Hydrocarbon (C12-C16)	2,200	20.0	2,504	0	88.0	70	130	2,357	6.74	30	
Aliphatic Hydrocarbon (C16-C21)	2,090	20.0	2,504	0	83.5	70	130	2,368	12.5	30	
Aliphatic Hydrocarbon (C21-C34)	2,020	20.0	2,504	0	80.7	70	130	2,251	10.8	30	
Aliphatic Hydrocarbon (C8-C10)	1,530	40.1	5,007	0	30.6	70	130	1,582	3.16	30	S
Surr: 1-Chlorooctadecane	1,260		2,003		62.8	60	140		0		

NOTES:
S - Outlying spike recovery observed (low bias).

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **MB-26341** SampType: **MBLK** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **MBLKW** Batch ID: **26341** Analysis Date: **11/6/2019** SeqNo: **1094964**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	ND	19.9		0	0						
Aromatic Hydrocarbon (C12-C16)	ND	19.9		0	0						
Aromatic Hydrocarbon (C16-C21)	ND	19.9		0	0						
Aromatic Hydrocarbon (C21-C34)	ND	19.9		0	0						*
Aromatic Hydrocarbon (C8-C10)	ND	19.9		0	0						
Surr: o-Terphenyl	1,630		1,993		81.9	60	140				

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

Sample ID: **LCS-26341** SampType: **LCS** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **LCSW** Batch ID: **26341** Analysis Date: **11/6/2019** SeqNo: **1094963**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	1,770	19.9	2,487	0	71.0	70	130				
Aromatic Hydrocarbon (C12-C16)	2,070	19.9	2,487	0	83.0	70	130				
Aromatic Hydrocarbon (C16-C21)	2,370	19.9	2,487	0	95.3	70	130				
Aromatic Hydrocarbon (C21-C34)	2,150	19.9	2,487	0	86.6	70	130				
Aromatic Hydrocarbon (C8-C10)	2,020	19.9	4,975	0	40.5	70	130				S
Surr: o-Terphenyl	1,690		1,990		85.1	60	140				

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

Sample ID: **1910514-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/6/2019** SeqNo: **1094962**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	ND	20.0		0	0			0		25	
Aromatic Hydrocarbon (C12-C16)	ND	20.0		0	0			0		25	
Aromatic Hydrocarbon (C16-C21)	ND	20.0		0	0			0		25	
Aromatic Hydrocarbon (C21-C34)	ND	20.0		0	0			0		25	*
Aromatic Hydrocarbon (C8-C10)	ND	20.0		0	0			0		25	
Surr: o-Terphenyl	1,740		2,001		86.8	60	140		0		

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **1910514-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/6/2019** SeqNo: **1094962**

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

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

Sample ID: **1910514-002BMS** SampType: **MS** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/6/2019** SeqNo: **1094965**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	1,770	20.0	2,497	0	70.8	70	130				
Aromatic Hydrocarbon (C12-C16)	2,200	20.0	2,497	0	88.1	70	130				
Aromatic Hydrocarbon (C16-C21)	2,460	20.0	2,497	0	98.6	70	130				
Aromatic Hydrocarbon (C21-C34)	2,140	20.0	2,497	0	85.8	70	130				
Aromatic Hydrocarbon (C8-C10)	2,300	20.0	4,995	0	46.0	70	130				S
Surr: o-Terphenyl	1,890		1,998		94.4	60	140				

NOTES:
S - Outlying spike recovery observed (low bias).

Sample ID: **1910514-002BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **10/31/2019** RunNo: **55104**
Client ID: **BATCH** Batch ID: **26341** Analysis Date: **11/6/2019** SeqNo: **1094966**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	1,500	20.0	2,504	0	60.1	70	130	1,768	16.1	30	S
Aromatic Hydrocarbon (C12-C16)	1,940	20.0	2,504	0	77.7	70	130	2,201	12.4	30	
Aromatic Hydrocarbon (C16-C21)	2,240	20.0	2,504	0	89.4	70	130	2,463	9.51	30	
Aromatic Hydrocarbon (C21-C34)	1,930	20.0	2,504	0	77.2	70	130	2,142	10.2	30	
Aromatic Hydrocarbon (C8-C10)	2,010	20.0	5,007	0	40.1	70	130	2,300	13.6	30	S
Surr: o-Terphenyl	1,690		2,003		84.3	60	140		0		

NOTES:
S - Outlying spike recovery observed (low bias).

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **LCS-26325** SampType: **LCS** Units: **µg/L** Prep Date: **10/30/2019** RunNo: **54982**
Client ID: **LCSW** Batch ID: **26325** Analysis Date: **10/30/2019** SeqNo: **1091804**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	690	40.0	600.0	0	115	70	130				
Aliphatic Hydrocarbon (C6-C8)	205	20.0	200.0	0	102	70	130				
Aliphatic Hydrocarbon (C8-C10)	216	20.0	200.0	0	108	70	130				
Aliphatic Hydrocarbon (C10-C12)	207	20.0	200.0	0	103	70	130				
Aromatic Hydrocarbon (C8-C10)	909	50.0	800.0	0	114	70	130				
Aromatic Hydrocarbon (C10-C12)	231	20.0	200.0	0	115	70	130				
Aromatic Hydrocarbon (C12-C13)	200	20.0	200.0	0	100	70	130				
Benzene	221	20.0	200.0	0	111	70	130				
Toluene	223	20.0	200.0	0	111	70	130				
Ethylbenzene	224	20.0	200.0	0	112	70	130				
m,p-Xylene	454	40.0	400.0	0	113	70	130				
o-Xylene	224	20.0	200.0	0	112	70	130				
Naphthalene	224	20.0	200.0	0	112	70	130				
Methyl tert-butyl ether (MTBE)	188	20.0	200.0	0	93.9	70	130				
Surr: 1,4-Difluorobenzene	50.7		50.00		101	65	140				
Surr: Bromofluorobenzene	52.9		50.00		106	65	140				

Sample ID: **LCSD-26325** SampType: **LCSD** Units: **µg/L** Prep Date: **10/30/2019** RunNo: **54982**
Client ID: **LCSW02** Batch ID: **26325** Analysis Date: **10/30/2019** SeqNo: **1091805**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	620	40.0	600.0	0	103	70	130	689.7	10.6	20	
Aliphatic Hydrocarbon (C6-C8)	201	20.0	200.0	0	101	70	130	204.6	1.74	20	
Aliphatic Hydrocarbon (C8-C10)	213	20.0	200.0	0	107	70	130	216.4	1.40	20	
Aliphatic Hydrocarbon (C10-C12)	211	20.0	200.0	0	105	70	130	207.0	1.90	20	
Aromatic Hydrocarbon (C8-C10)	849	50.0	800.0	0	106	70	130	908.7	6.78	20	
Aromatic Hydrocarbon (C10-C12)	218	20.0	200.0	0	109	70	130	230.9	5.53	20	
Aromatic Hydrocarbon (C12-C13)	203	20.0	200.0	0	102	70	130	200.1	1.59	20	
Benzene	206	20.0	200.0	0	103	70	130	221.0	7.09	20	
Toluene	207	20.0	200.0	0	104	70	130	222.9	7.16	20	

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **LCSD-26325** SampType: **LCSD** Units: **µg/L** Prep Date: **10/30/2019** RunNo: **54982**
Client ID: **LCSW02** Batch ID: **26325** Analysis Date: **10/30/2019** SeqNo: **1091805**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	207	20.0	200.0	0	104	70	130	224.2	7.75	20	
m,p-Xylene	421	40.0	400.0	0	105	70	130	454.0	7.49	20	
o-Xylene	208	20.0	200.0	0	104	70	130	223.9	7.13	20	
Naphthalene	217	20.0	200.0	0	108	70	130	223.5	2.98	20	
Methyl tert-butyl ether (MTBE)	219	20.0	200.0	0	110	70	130	187.8	15.4	20	
Surr: 1,4-Difluorobenzene	49.7		50.00		99.4	65	140		0		
Surr: Bromofluorobenzene	51.8		50.00		104	65	140		0		

Sample ID: **MB-26325** SampType: **MBLK** Units: **µg/L** Prep Date: **10/30/2019** RunNo: **54982**
Client ID: **MBLKW** Batch ID: **26325** Analysis Date: **10/30/2019** SeqNo: **1091806**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	40.0		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	20.0		0	0						
Aliphatic Hydrocarbon (C8-C10)	ND	20.0		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	20.0		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	50.0		0	0						
Aromatic Hydrocarbon (C10-C12)	ND	20.0		0	0						
Aromatic Hydrocarbon (C12-C13)	ND	20.0		0	0						
Benzene	ND	20.0		0	0						
Toluene	ND	20.0		0	0						
Ethylbenzene	ND	20.0		0	0						
m,p-Xylene	ND	40.0		0	0						
o-Xylene	ND	20.0		0	0						
Naphthalene	ND	20.0		0	0						
Methyl tert-butyl ether (MTBE)	ND	20.0		0	0						Q
Surr: 1,4-Difluorobenzene	45.6		50.00		91.3	65	140				
Surr: Bromofluorobenzene	50.0		50.00		99.9	65	140				

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

Work Order: 1910458
CLIENT: Apex Laboratories
Project: A9J0847

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: **1910458-002BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **10/30/2019** RunNo: **54982**
Client ID: **MW5** Batch ID: **26325** Analysis Date: **10/30/2019** SeqNo: **1091796**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	40.0		0	0			0		25	
Aliphatic Hydrocarbon (C6-C8)	ND	20.0		0	0			0		25	
Aliphatic Hydrocarbon (C8-C10)	ND	20.0		0	0			0		25	
Aliphatic Hydrocarbon (C10-C12)	ND	20.0		0	0			0		25	
Aromatic Hydrocarbon (C8-C10)	ND	50.0		0	0			0		25	
Aromatic Hydrocarbon (C10-C12)	ND	20.0		0	0			0		25	
Aromatic Hydrocarbon (C12-C13)	ND	20.0		0	0			0		25	
Benzene	ND	20.0		0	0			0		25	
Toluene	ND	20.0		0	0			0		25	
Ethylbenzene	ND	20.0		0	0			0		25	
m,p-Xylene	ND	40.0		0	0			0		25	
o-Xylene	ND	20.0		0	0			0		25	
Naphthalene	ND	20.0		0	0			0		25	
Methyl tert-butyl ether (MTBE)	ND	20.0		0	0			0		25	Q
Surr: 1,4-Difluorobenzene	49.7		50.00		99.5	65	140		0		
Surr: Bromofluorobenzene	52.9		50.00		106	65	140		0		

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

Sample Log-In Check List

Client Name:	APEX	Work Order Number:	1910458
Logged by:	Carissa True	Date Received:	10/25/2019 9:29:00 AM

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	2.8
Sample 1	3.7
Temp Blank 1	2.4

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

SUBCONTRACT ORDER

Apex Laboratories

A9J0847

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Kevin J. Friscia

RECEIVING LABORATORY:

Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103
Phone :(206) 352-3790
Fax: (206) 352-7178

1910458

Sample Name: MW4 **Water** **Sampled: 10/22/19 06:55** (A9J0847-04)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	11/01/19 17:00	11/05/19 06:55	
NWTPH-VPH (Sub)	11/01/19 17:00	11/05/19 06:55	

Containers Supplied:
(D)40 mL VOA - HCL
(E)40 mL VOA - HCL
(F)40 mL VOA - HCL
(G)1 L Amber Glass - HCL

Sample Name: MW5 **Water** **Sampled: 10/22/19 06:45** (A9J0847-05)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	11/01/19 17:00	11/05/19 06:45	
NWTPH-VPH (Sub)	11/01/19 17:00	11/05/19 06:45	

Containers Supplied:
(D)40 mL VOA - HCL
(E)40 mL VOA - HCL
(F)40 mL VOA - HCL
(G)1 L Amber Glass - HCL

Std TAT

Released By	Date	Received By	Date
	10/24/19	UPS (Shipper)	
UPS (Shipper)			
Released By	Date	Received By	10/25/19 @ 0929 Date

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Friday, November 8, 2019

Gil Cobb
Point Source Solutions, LLC
10445 SW Canyon Road Suite 115
Beaverton, OR 97005

RE: A9J1094 - Arcoa Building - OR190501-3

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A9J1094, which was received by the laboratory on 10/30/2019 at 10:22:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: KFriscia@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample reciept, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	4.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Drum Contents	**A9J1094-01**	**Soil**	**10/30/19 09:10**	**10/30/19 10:22**

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503-718-2323
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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

ANALYTICAL SAMPLE RESULTS

TCLP Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Drum Contents (A9J1094-01)				**Matrix: Soil**				
Batch: 9110362								
Arsenic	ND	---	0.100	mg/L	10	11/01/19 13:19	1311/6020A	
Barium	ND	---	5.00	mg/L	10	11/01/19 13:19	1311/6020A	
Cadmium	ND	---	0.100	mg/L	10	11/01/19 13:19	1311/6020A	
Chromium	ND	---	0.100	mg/L	10	11/01/19 13:19	1311/6020A	
Lead	ND	---	0.0500	mg/L	10	11/01/19 13:19	1311/6020A	
Mercury	ND	---	0.00700	mg/L	10	11/01/19 13:19	1311/6020A	
Selenium	ND	---	0.100	mg/L	10	11/01/19 13:19	1311/6020A	
Silver	ND	---	0.100	mg/L	10	11/01/19 13:19	1311/6020A	

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Kevin J. Friscia, Project Manager

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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

ANALYTICAL SAMPLE RESULTS

TCLP Extraction by EPA 1311

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Drum Contents (A9J1094-01)				**Matrix: Soil**		**Batch: 9101811**		
TCLP Extraction	PREP	---		N/A	1	10/31/19 15:35	EPA 1311	

Apex Laboratories

Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

QUALITY CONTROL (QC) SAMPLE RESULTS

TCLP Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110362 - EPA 1311/3015							**Solid**					
Blank (9110362-BLK1)		Prepared: 11/01/19 08:35		Analyzed: 11/01/19 12:47								
1311/6020A												
Arsenic	ND	---	0.100	mg/L	10	---	---	---	---	---	---	TCLP
Barium	ND	---	5.00	mg/L	10	---	---	---	---	---	---	TCLP
Cadmium	ND	---	0.100	mg/L	10	---	---	---	---	---	---	TCLP
Chromium	ND	---	0.100	mg/L	10	---	---	---	---	---	---	TCLP
Lead	ND	---	0.0500	mg/L	10	---	---	---	---	---	---	TCLP
Mercury	ND	---	0.00700	mg/L	10	---	---	---	---	---	---	TCLP
Selenium	ND	---	0.100	mg/L	10	---	---	---	---	---	---	TCLP
Silver	ND	---	0.100	mg/L	10	---	---	---	---	---	---	TCLP
LCS (9110362-BS1)		Prepared: 11/01/19 08:35		Analyzed: 11/01/19 12:51								
1311/6020A												
Arsenic	5.53	---	0.100	mg/L	10	5.00	---	111	80 - 120%	---	---	TCLP
Barium	11.4	---	5.00	mg/L	10	10.0	---	114	80 - 120%	---	---	TCLP
Cadmium	1.12	---	0.100	mg/L	10	1.00	---	112	80 - 120%	---	---	TCLP
Chromium	5.36	---	0.100	mg/L	10	5.00	---	107	80 - 120%	---	---	TCLP
Lead	5.68	---	0.0500	mg/L	10	5.00	---	114	80 - 120%	---	---	TCLP
Mercury	0.112	---	0.00700	mg/L	10	0.100	---	112	80 - 120%	---	---	TCLP
Selenium	1.11	---	0.100	mg/L	10	1.00	---	111	80 - 120%	---	---	TCLP
Silver	1.15	---	0.100	mg/L	10	1.00	---	115	80 - 120%	---	---	TCLP

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

SAMPLE PREPARATION INFORMATION

TCLP Metals by EPA 6020A (ICPMS)

Prep: EPA 1311/3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110362							
A9J1094-01	Soil	1311/6020A	10/30/19 09:10	11/01/19 08:35	10mL/50mL	10mL/50mL	1.00

TCLP Extraction by EPA 1311

Prep: EPA 1311 (TCLP)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9101811							
A9J1094-01	Soil	EPA 1311	10/30/19 09:10	10/31/19 15:35	100g/2000mL	100g/2000mL	NA

Apex Laboratories

Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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Point Source Solutions, LLC	Project:	**Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number:	**OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager:	**Gil Cobb**	**A9J1094 - 11 08 19 1338**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

TCLP	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 9101811.

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported.

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Kevin J. Friscia, Project Manager

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Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

LABORATORY ACCREDITATION INFORMATION

TNI Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
All reported analytes are included in Apex Laboratories' current ORELAP scope.					

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Kevin J. Friscia, Project Manager

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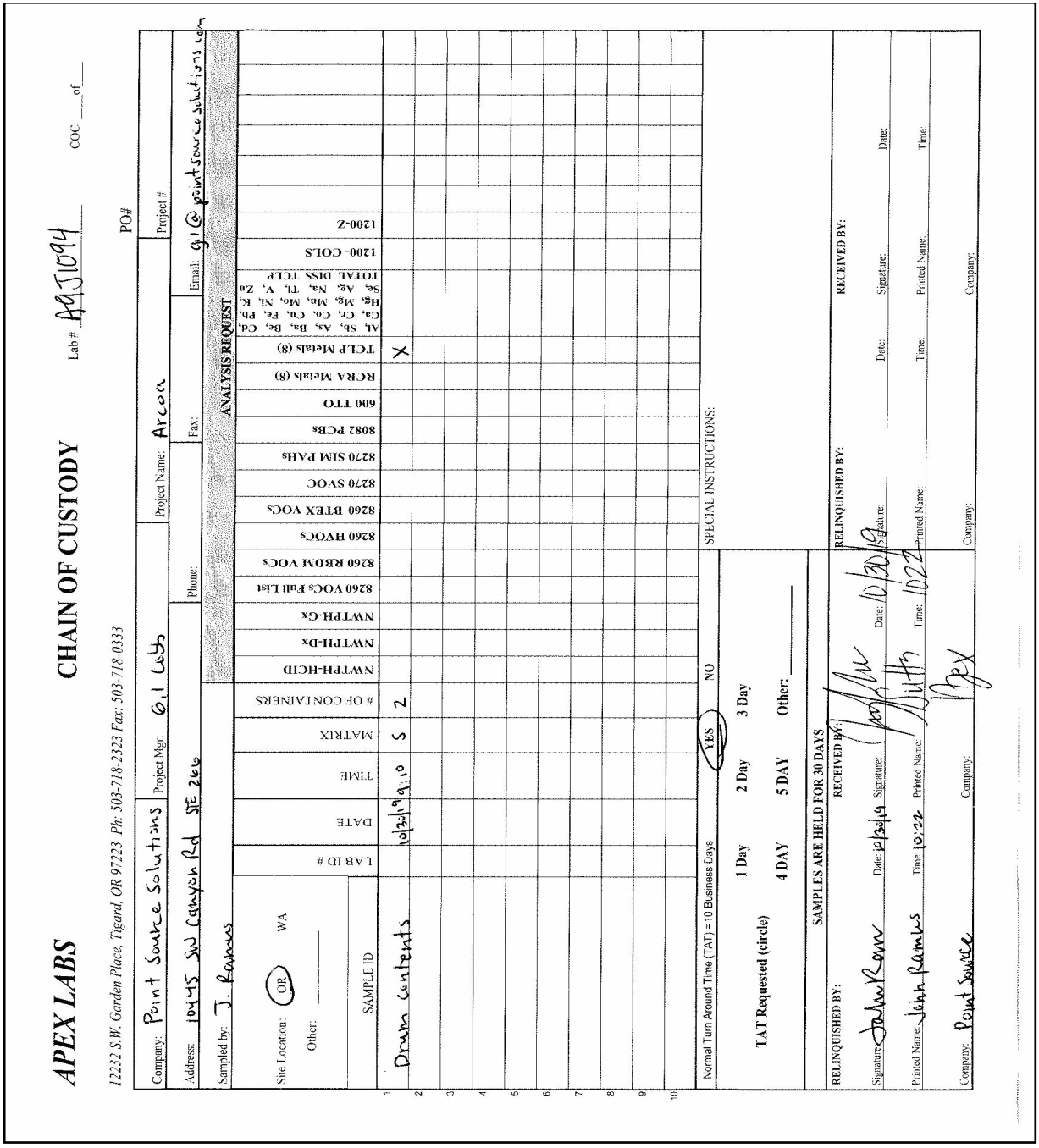
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**



APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

Lab # A9J1094 COC ___ of ___

PO#

Company: Point Source Solutions | Project Mgr: Gil Cobb | Project Name: Arcoa | Project #

Address: 10445 SW Canyon Rd STE 200 | Phone: | Fax: | Email: gil@pointsourcesolutions.com

Sampled by: J. Ramos

Site Location: (OR) WA Other: _____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 VOCs Full List	8260 RBDM VOCs	8260 HVOCs	8260 BTEX VOCs	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS TCLP	1200- COLS	1200-Z
1 Drum contents		10/31/19	9:10	S	2													X			
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Normal Turn Around Time (TAT) = 10 Business Days | SPECIAL INSTRUCTIONS: | YES (NO)

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: _____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: | RECEIVED BY:

Signature: John Ramos | Date: 10/31/19 | Signature: | Date:

Printed Name: John Ramos | Time: 10:22 | Printed Name: | Time:

Company: Point Source | Company:

RELINQUISHED BY: | RECEIVED BY:

Signature: | Date: 10/31/19 | Signature: | Date:

Printed Name: | Time: 1022 | Printed Name: | Time:

Company: | Company:

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A9J1094 - 11 08 19 1338**

APEX LABS COOLER RECEIPT FORM

Client: Point Source Solutions Element WO#: A9J1094

Project/Project #: Arcoa

Delivery Info:

Date/time received: 10/30/19 @ 1022 By: JS

Delivered by: Apex___ Client X ESS___ FedEx___ UPS___ Swift___ Senvoy___ SDS___ Other___

Cooler Inspection Date/time inspected: 10/30/19 @ 1040 By: JS

Chain of Custody included? Yes X No___ Custody seals? Yes___ No Y

Signed/dated by client? Yes X No___

Signed/dated by Apex? Yes X No___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	4.9						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	gel						
Condition:	good						

Cooler out of temp? (Y/N) Possible reason why:

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 10/30/19 @ 1222 By: AKK

All samples intact? Yes X No___ Comments:

Bottle labels/COCs agree? Yes X No___ Comments:

COC/container discrepancies form initiated? Yes___ No___ NA X

Containers/volumes received appropriate for analysis? Yes X No___ Comments:

Do VOA vials have visible headspace? Yes___ No___ NA X

Comments

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments:

Additional information:

Labeled by: AKK Witness: CM Cooler Inspected by: Client 10/30/19 See Project Contact Form: Y

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
EPA ID: OR01039

Friday, February 14, 2020

Gil Cobb
Point Source Solutions, LLC
10445 SW Canyon Road Suite 115
Beaverton, OR 97005

RE: A0B0057 - Arcoa Building - OR190501-3

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A0B0057, which was received by the laboratory on 2/4/2020 at 10:29:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: KFriscia@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample reciept, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	0.8	degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW1	A0B0057-01	Water	02/04/20 08:10	02/04/20 10:29
MW2	A0B0057-02	Water	02/04/20 08:15	02/04/20 10:29
MW3	A0B0057-03	Water	02/04/20 09:01	02/04/20 10:29
MW4	A0B0057-04	Water	02/04/20 07:11	02/04/20 10:29
MW5	A0B0057-05	Water	02/04/20 07:04	02/04/20 10:29

Apex Laboratories

Kevin J. Friscia, Project Manager

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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1 (A0B0057-01)				**Matrix: Water**		**Batch: 0020148**		
Diesel	ND	---	0.0748	mg/L	1	02/06/20 04:00	NWTPH-Dx	
Oil	ND	---	0.150	mg/L	1	02/06/20 04:00	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*	*1*	*02/06/20 04:00*	*NWTPH-Dx*	
MW2 (A0B0057-02)				**Matrix: Water**		**Batch: 0020148**		
Diesel	ND	---	0.0800	mg/L	1	02/06/20 04:20	NWTPH-Dx	
Oil	ND	---	0.160	mg/L	1	02/06/20 04:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 90 %*		*Limits: 50-150 %*	*1*	*02/06/20 04:20*	*NWTPH-Dx*	
MW3 (A0B0057-03)				**Matrix: Water**		**Batch: 0020148**		
Diesel	ND	---	0.0748	mg/L	1	02/06/20 04:40	NWTPH-Dx	
Oil	ND	---	0.150	mg/L	1	02/06/20 04:40	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*		*Limits: 50-150 %*	*1*	*02/06/20 04:40*	*NWTPH-Dx*	
MW4 (A0B0057-04)				**Matrix: Water**		**Batch: 0020148**		
Diesel	**0.125**	---	0.0748	mg/L	1	02/06/20 05:00	NWTPH-Dx	**F-11, F-20**
Oil	ND	---	0.150	mg/L	1	02/06/20 05:00	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*02/06/20 05:00*	*NWTPH-Dx*	
MW5 (A0B0057-05)				**Matrix: Water**		**Batch: 0020148**		
Diesel	ND	---	0.0825	mg/L	1	02/06/20 05:20	NWTPH-Dx	
Oil	ND	---	0.165	mg/L	1	02/06/20 05:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 84 %*		*Limits: 50-150 %*	*1*	*02/06/20 05:20*	*NWTPH-Dx*	

Apex Laboratories

Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1 (A0B0057-01)				**Matrix: Water**		**Batch: 0020135**		
Gasoline Range Organics	ND	---	0.100	mg/L	1	02/05/20 16:53	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*94 %*	*Limits: 50-150 %*	*1*	*02/05/20 16:53*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*02/05/20 16:53*	*NWTPH-Gx (MS)*	
MW2 (A0B0057-02)				**Matrix: Water**		**Batch: 0020135**		
Gasoline Range Organics	ND	---	0.100	mg/L	1	02/05/20 17:20	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*98 %*	*Limits: 50-150 %*	*1*	*02/05/20 17:20*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*02/05/20 17:20*	*NWTPH-Gx (MS)*	
MW3 (A0B0057-03)				**Matrix: Water**		**Batch: 0020135**		
Gasoline Range Organics	ND	---	0.100	mg/L	1	02/05/20 17:47	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*98 %*	*Limits: 50-150 %*	*1*	*02/05/20 17:47*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*02/05/20 17:47*	*NWTPH-Gx (MS)*	
MW4 (A0B0057-04)				**Matrix: Water**		**Batch: 0020135**		
Gasoline Range Organics	**1.10**	---	0.100	mg/L	1	02/05/20 18:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*134 %*	*Limits: 50-150 %*	*1*	*02/05/20 18:14*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*	*1*	*02/05/20 18:14*	*NWTPH-Gx (MS)*	
MW5 (A0B0057-05)				**Matrix: Water**		**Batch: 0020135**		
Gasoline Range Organics	ND	---	0.100	mg/L	1	02/05/20 18:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*95 %*	*Limits: 50-150 %*	*1*	*02/05/20 18:41*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*02/05/20 18:41*	*NWTPH-Gx (MS)*	

Apex Laboratories

Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1 (A0B0057-01)				**Matrix: Water**		**Batch: 0020135**		
Acetone	ND	---	20.0	ug/L	1	02/05/20 16:53	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	02/05/20 16:53	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	02/05/20 16:53	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	02/05/20 16:53	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	02/05/20 16:53	EPA 8260C	
Carbon tetrachloride	ND	---	2.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	02/05/20 16:53	EPA 8260C	EST
Chloroform	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	02/05/20 16:53	EPA 8260C	
2-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW1 (A0B0057-01)				**Matrix: Water**		**Batch: 0020135**		
Ethylbenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	02/05/20 16:53	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	02/05/20 16:53	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	02/05/20 16:53	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	02/05/20 16:53	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	02/05/20 16:53	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
Vinyl chloride	ND	---	0.400	ug/L	1	02/05/20 16:53	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	02/05/20 16:53	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	02/05/20 16:53	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits:*	*80-120 %*	*1*	*02/05/20 16:53*	*EPA 8260C*	
Toluene-d8 (Surr)			*105 %*		*80-120 %*	*1*	*02/05/20 16:53*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*	*1*	*02/05/20 16:53*	*EPA 8260C*	
MW2 (A0B0057-02)				**Matrix: Water**		**Batch: 0020135**		
Acetone	ND	---	20.0	ug/L	1	02/05/20 17:20	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	02/05/20 17:20	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW2 (A0B0057-02)				**Matrix: Water**		**Batch: 0020135**		
Bromoform	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	02/05/20 17:20	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	02/05/20 17:20	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	02/05/20 17:20	EPA 8260C	
Carbon tetrachloride	ND	---	2.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	02/05/20 17:20	EPA 8260C	EST
Chloroform	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	02/05/20 17:20	EPA 8260C	
2-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	02/05/20 17:20	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	02/05/20 17:20	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	02/05/20 17:20	EPA 8260C	

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW2 (A0B0057-02)				**Matrix: Water**		**Batch: 0020135**		
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	02/05/20 17:20	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	02/05/20 17:20	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
Vinyl chloride	ND	---	0.400	ug/L	1	02/05/20 17:20	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	02/05/20 17:20	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	02/05/20 17:20	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits:*	*80-120 %*	*1*	*02/05/20 17:20*	*EPA 8260C*	
Toluene-d8 (Surr)			*101 %*		*80-120 %*	*1*	*02/05/20 17:20*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*	*1*	*02/05/20 17:20*	*EPA 8260C*	
MW3 (A0B0057-03)				**Matrix: Water**		**Batch: 0020135**		
Acetone	ND	---	20.0	ug/L	1	02/05/20 17:47	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	02/05/20 17:47	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	02/05/20 17:47	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	02/05/20 17:47	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW3 (A0B0057-03)				**Matrix: Water**		**Batch: 0020135**		
Carbon disulfide	ND	---	10.0	ug/L	1	02/05/20 17:47	EPA 8260C	
Carbon tetrachloride	ND	---	2.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	02/05/20 17:47	EPA 8260C	EST
Chloroform	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	02/05/20 17:47	EPA 8260C	
2-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	02/05/20 17:47	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	02/05/20 17:47	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	02/05/20 17:47	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	02/05/20 17:47	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	02/05/20 17:47	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW3 (A0B0057-03)				**Matrix: Water**		**Batch: 0020135**		
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
Vinyl chloride	ND	---	0.400	ug/L	1	02/05/20 17:47	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	02/05/20 17:47	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	02/05/20 17:47	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*02/05/20 17:47*	*EPA 8260C*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*02/05/20 17:47*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/05/20 17:47*	*EPA 8260C*	
MW4 (A0B0057-04)				**Matrix: Water**		**Batch: 0020135**		
Acetone	ND	---	20.0	ug/L	1	02/05/20 18:14	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Benzene	**0.215**	---	0.200	ug/L	1	02/05/20 18:14	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	02/05/20 18:14	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	02/05/20 18:14	EPA 8260C	
n-Butylbenzene	**2.87**	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
sec-Butylbenzene	**13.3**	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
tert-Butylbenzene	**1.17**	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	02/05/20 18:14	EPA 8260C	
Carbon tetrachloride	ND	---	2.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	02/05/20 18:14	EPA 8260C	EST
Chloroform	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	02/05/20 18:14	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4 (A0B0057-04)				**Matrix: Water**		**Batch: 0020135**		
2-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
cis-1,2-Dichloroethene	**0.747**	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Ethylbenzene	**1.32**	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	02/05/20 18:14	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	02/05/20 18:14	EPA 8260C	
Isopropylbenzene	**7.07**	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	02/05/20 18:14	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	02/05/20 18:14	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	02/05/20 18:14	EPA 8260C	
n-Propylbenzene	**9.99**	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	

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Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW4 (A0B0057-04)				**Matrix: Water**		**Batch: 0020135**		
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,2,4-Trimethylbenzene	**16.0**	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
1,3,5-Trimethylbenzene	**2.24**	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
Vinyl chloride	**0.614**	---	0.400	ug/L	1	02/05/20 18:14	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	02/05/20 18:14	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	02/05/20 18:14	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits:*	*80-120 %*	*1*	*02/05/20 18:14*	*EPA 8260C*	
Toluene-d8 (Surr)			*101 %*		*80-120 %*	*1*	*02/05/20 18:14*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*	*1*	*02/05/20 18:14*	*EPA 8260C*	
MW5 (A0B0057-05)				**Matrix: Water**		**Batch: 0020135**		
Acetone	ND	---	20.0	ug/L	1	02/05/20 18:41	EPA 8260C	
Acrylonitrile	ND	---	2.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Benzene	ND	---	0.200	ug/L	1	02/05/20 18:41	EPA 8260C	
Bromobenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Bromochloromethane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Bromodichloromethane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Bromoform	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Bromomethane	ND	---	5.00	ug/L	1	02/05/20 18:41	EPA 8260C	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	02/05/20 18:41	EPA 8260C	
n-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
sec-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
tert-Butylbenzene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Carbon disulfide	ND	---	10.0	ug/L	1	02/05/20 18:41	EPA 8260C	
Carbon tetrachloride	ND	---	2.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Chlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Chloroethane	ND	---	5.00	ug/L	1	02/05/20 18:41	EPA 8260C	EST
Chloroform	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Chloromethane	ND	---	5.00	ug/L	1	02/05/20 18:41	EPA 8260C	
2-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
4-Chlorotoluene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Dibromochloromethane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Dibromomethane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5 (A0B0057-05)				**Matrix: Water**		**Batch: 0020135**		
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2-Dichloropropane	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	02/05/20 18:41	EPA 8260C	
2-Hexanone	ND	---	10.0	ug/L	1	02/05/20 18:41	EPA 8260C	
Isopropylbenzene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Methylene chloride	ND	---	10.0	ug/L	1	02/05/20 18:41	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	02/05/20 18:41	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	02/05/20 18:41	EPA 8260C	
n-Propylbenzene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Styrene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Tetrachloroethene (PCE)	**0.503**	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW5 (A0B0057-05)				**Matrix: Water**		**Batch: 0020135**		
Vinyl chloride	ND	---	0.400	ug/L	1	02/05/20 18:41	EPA 8260C	
m,p-Xylene	ND	---	1.00	ug/L	1	02/05/20 18:41	EPA 8260C	
o-Xylene	ND	---	0.500	ug/L	1	02/05/20 18:41	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*02/05/20 18:41*	*EPA 8260C*	
Toluene-d8 (Surr)			*104 %*	*80-120 %*	*1*	*02/05/20 18:41*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*02/05/20 18:41*	*EPA 8260C*	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020148 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (0020148-BLK1)		Prepared: 02/05/20 12:51		Analyzed: 02/06/20 02:41								
NWTPH-Dx												
Diesel	ND	---	0.0727	mg/L	1	---	---	---	---	---	---	
Oil	ND	---	0.145	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (0020148-BS1)		Prepared: 02/05/20 12:51		Analyzed: 02/06/20 03:01								
NWTPH-Dx												
Diesel	0.431	---	0.0800	mg/L	1	0.500	---	86	58 - 115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS Dup (0020148-BSD1)		Prepared: 02/05/20 12:51		Analyzed: 02/06/20 03:20								**Q-19**
NWTPH-Dx												
Diesel	0.437	---	0.0800	mg/L	1	0.500	---	87	58 - 115%	1	20%	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*			*Dilution: 1x*					

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020135 - EPA 5030B									Water			
Blank (0020135-BLK1)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 13:44								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*		*50-150 %*			*"*				
LCS (0020135-BS2)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 13:17								
NWTPH-Gx (MS)												
Gasoline Range Organics	0.445	---	0.100	mg/L	1	0.500	---	89	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*99 %*		*50-150 %*			*"*				

Apex Laboratories

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020135 - EPA 5030B							**Water**					
Blank (0020135-BLK1)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 13:44								
EPA 8260C												
Acetone	ND	---	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	EST
Chloroform	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.400	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020135 - EPA 5030B							**Water**					
Blank (0020135-BLK1)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 13:44								
1,2-Dichloropropane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 101 %*		*Limits: 80-120 %*					*Dilution: 1x*			

Apex Laboratories

Kevin J. Friscia, Project Manager

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503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	A0B0057 - 02 14 20 1606

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020135 - EPA 5030B									Water			
Blank (0020135-BLK1)			Prepared: 02/05/20 12:00 Analyzed: 02/05/20 13:44									
Surr: Toluene-d8 (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*			*"*					
LCS (0020135-BS1)			Prepared: 02/05/20 12:00 Analyzed: 02/05/20 12:50									
EPA 8260C												
Acetone	38.7	---	20.0	ug/L	1	40.0	---	97	80 - 120%	---	---	
Acrylonitrile	21.0	---	2.00	ug/L	1	20.0	---	105	80 - 120%	---	---	
Benzene	20.5	---	0.200	ug/L	1	20.0	---	103	80 - 120%	---	---	
Bromobenzene	19.1	---	0.500	ug/L	1	20.0	---	96	80 - 120%	---	---	
Bromochloromethane	22.5	---	1.00	ug/L	1	20.0	---	113	80 - 120%	---	---	
Bromodichloromethane	19.7	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	
Bromoform	17.4	---	1.00	ug/L	1	20.0	---	87	80 - 120%	---	---	
Bromomethane	24.1	---	5.00	ug/L	1	20.0	---	**121**	**80 - 120%**	---	---	Q-56
2-Butanone (MEK)	40.0	---	10.0	ug/L	1	40.0	---	100	80 - 120%	---	---	
n-Butylbenzene	20.1	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
sec-Butylbenzene	19.2	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
tert-Butylbenzene	17.8	---	1.00	ug/L	1	20.0	---	89	80 - 120%	---	---	
Carbon disulfide	17.9	---	10.0	ug/L	1	20.0	---	90	80 - 120%	---	---	
Carbon tetrachloride	17.6	---	2.00	ug/L	1	20.0	---	88	80 - 120%	---	---	
Chlorobenzene	19.8	---	0.500	ug/L	1	20.0	---	99	80 - 120%	---	---	
Chloroethane	26.2	---	5.00	ug/L	1	20.0	---	**131**	**80 - 120%**	---	---	Q-56, EST
Chloroform	21.4	---	1.00	ug/L	1	20.0	---	107	80 - 120%	---	---	
Chloromethane	20.7	---	5.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
2-Chlorotoluene	18.8	---	1.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
4-Chlorotoluene	17.9	---	1.00	ug/L	1	20.0	---	89	80 - 120%	---	---	
Dibromochloromethane	18.2	---	1.00	ug/L	1	20.0	---	91	80 - 120%	---	---	
1,2-Dibromo-3-chloropropane	15.3	---	5.00	ug/L	1	20.0	---	**77**	**80 - 120%**	---	---	Q-55
1,2-Dibromoethane (EDB)	20.6	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Dibromomethane	20.6	---	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
1,2-Dichlorobenzene	19.4	---	0.500	ug/L	1	20.0	---	97	80 - 120%	---	---	
1,3-Dichlorobenzene	19.5	---	0.500	ug/L	1	20.0	---	98	80 - 120%	---	---	
1,4-Dichlorobenzene	18.7	---	0.500	ug/L	1	20.0	---	94	80 - 120%	---	---	
Dichlorodifluoromethane	19.5	---	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
1,1-Dichloroethane	20.7	---	0.400	ug/L	1	20.0	---	103	80 - 120%	---	---	

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Kevin J. Friscia, Project Manager

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EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020135 - EPA 5030B							**Water**					
LCS (0020135-BS1)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 12:50								
1,2-Dichloroethane (EDC)	21.3	---	0.400	ug/L	1	20.0	---	107	80 - 120%	---	---	
1,1-Dichloroethene	19.9	---	0.400	ug/L	1	20.0	---	99	80 - 120%	---	---	
cis-1,2-Dichloroethene	21.1	---	0.400	ug/L	1	20.0	---	106	80 - 120%	---	---	
trans-1,2-Dichloroethene	20.3	---	0.400	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,2-Dichloropropane	20.4	---	0.500	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,3-Dichloropropane	20.2	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
2,2-Dichloropropane	20.6	---	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
1,1-Dichloropropene	19.9	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
cis-1,3-Dichloropropene	19.2	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
trans-1,3-Dichloropropene	19.1	---	1.00	ug/L	1	20.0	---	95	80 - 120%	---	---	
Ethylbenzene	20.3	---	0.500	ug/L	1	20.0	---	101	80 - 120%	---	---	
Hexachlorobutadiene	18.9	---	5.00	ug/L	1	20.0	---	95	80 - 120%	---	---	
2-Hexanone	38.5	---	10.0	ug/L	1	40.0	---	96	80 - 120%	---	---	
Isopropylbenzene	20.2	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
4-Isopropyltoluene	20.0	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
Methylene chloride	19.5	---	10.0	ug/L	1	20.0	---	97	80 - 120%	---	---	
4-Methyl-2-pentanone (MiBK)	38.4	---	10.0	ug/L	1	40.0	---	96	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	19.1	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Naphthalene	19.5	---	2.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
n-Propylbenzene	18.2	---	0.500	ug/L	1	20.0	---	91	80 - 120%	---	---	
Styrene	21.2	---	1.00	ug/L	1	20.0	---	106	80 - 120%	---	---	
1,1,1,2-Tetrachloroethane	20.3	---	0.400	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,1,2,2-Tetrachloroethane	20.6	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Tetrachloroethene (PCE)	19.9	---	0.400	ug/L	1	20.0	---	99	80 - 120%	---	---	
Toluene	20.2	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2,3-Trichlorobenzene	20.2	---	2.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2,4-Trichlorobenzene	18.7	---	2.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
1,1,1-Trichloroethane	20.8	---	0.400	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,1,2-Trichloroethane	20.0	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Trichloroethene (TCE)	20.3	---	0.400	ug/L	1	20.0	---	102	80 - 120%	---	---	
Trichlorofluoromethane	27.6	---	2.00	ug/L	1	20.0	---	**138**	**80 - 120%**	---	---	Q-56
1,2,3-Trichloropropane	20.1	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,2,4-Trimethylbenzene	19.7	---	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
1,3,5-Trimethylbenzene	19.2	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020135 - EPA 5030B												**Water**
LCS (0020135-BS1)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 12:50								
Vinyl chloride	22.0	---	0.400	ug/L	1	20.0	---	110	80 - 120%	---	---	
m,p-Xylene	40.7	---	1.00	ug/L	1	40.0	---	102	80 - 120%	---	---	
o-Xylene	20.2	---	0.500	ug/L	1	20.0	---	101	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 101 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*98 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*91 %*		*80-120 %*			*"*					

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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020148							
A0B0057-01	Water	NWTPH-Dx	02/04/20 08:10	02/05/20 12:51	1070mL/2mL	1000mL/2mL	0.94
A0B0057-02	Water	NWTPH-Dx	02/04/20 08:15	02/05/20 12:51	1000mL/2mL	1000mL/2mL	1.00
A0B0057-03	Water	NWTPH-Dx	02/04/20 09:01	02/05/20 12:51	1070mL/2mL	1000mL/2mL	0.94
A0B0057-04	Water	NWTPH-Dx	02/04/20 07:11	02/05/20 12:51	1070mL/2mL	1000mL/2mL	0.94
A0B0057-05	Water	NWTPH-Dx	02/04/20 07:04	02/05/20 12:51	970mL/2mL	1000mL/2mL	1.03

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020135							
A0B0057-01	Water	NWTPH-Gx (MS)	02/04/20 08:10	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-02	Water	NWTPH-Gx (MS)	02/04/20 08:15	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-03	Water	NWTPH-Gx (MS)	02/04/20 09:01	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-04	Water	NWTPH-Gx (MS)	02/04/20 07:11	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-05	Water	NWTPH-Gx (MS)	02/04/20 07:04	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020135							
A0B0057-01	Water	EPA 8260C	02/04/20 08:10	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-02	Water	EPA 8260C	02/04/20 08:15	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-03	Water	EPA 8260C	02/04/20 09:01	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-04	Water	EPA 8260C	02/04/20 07:11	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00
A0B0057-05	Water	EPA 8260C	02/04/20 07:04	02/05/20 13:09	5mL/5mL	5mL/5mL	1.00

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Kevin J. Friscia, Project Manager

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

EST	Result reported as an Estimated Value. Results estimated. Initial Calibration Verification Standard (ICV) failed low.
F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
F-20	Result for Diesel is Estimated due to overlap from Gasoline Range Organics or other VOCs.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260C, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported.

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Kevin J. Friscia, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Kevin J. Friscia, Project Manager

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10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

LABORATORY ACCREDITATION INFORMATION

TNI Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Kevin J. Friscia, Project Manager

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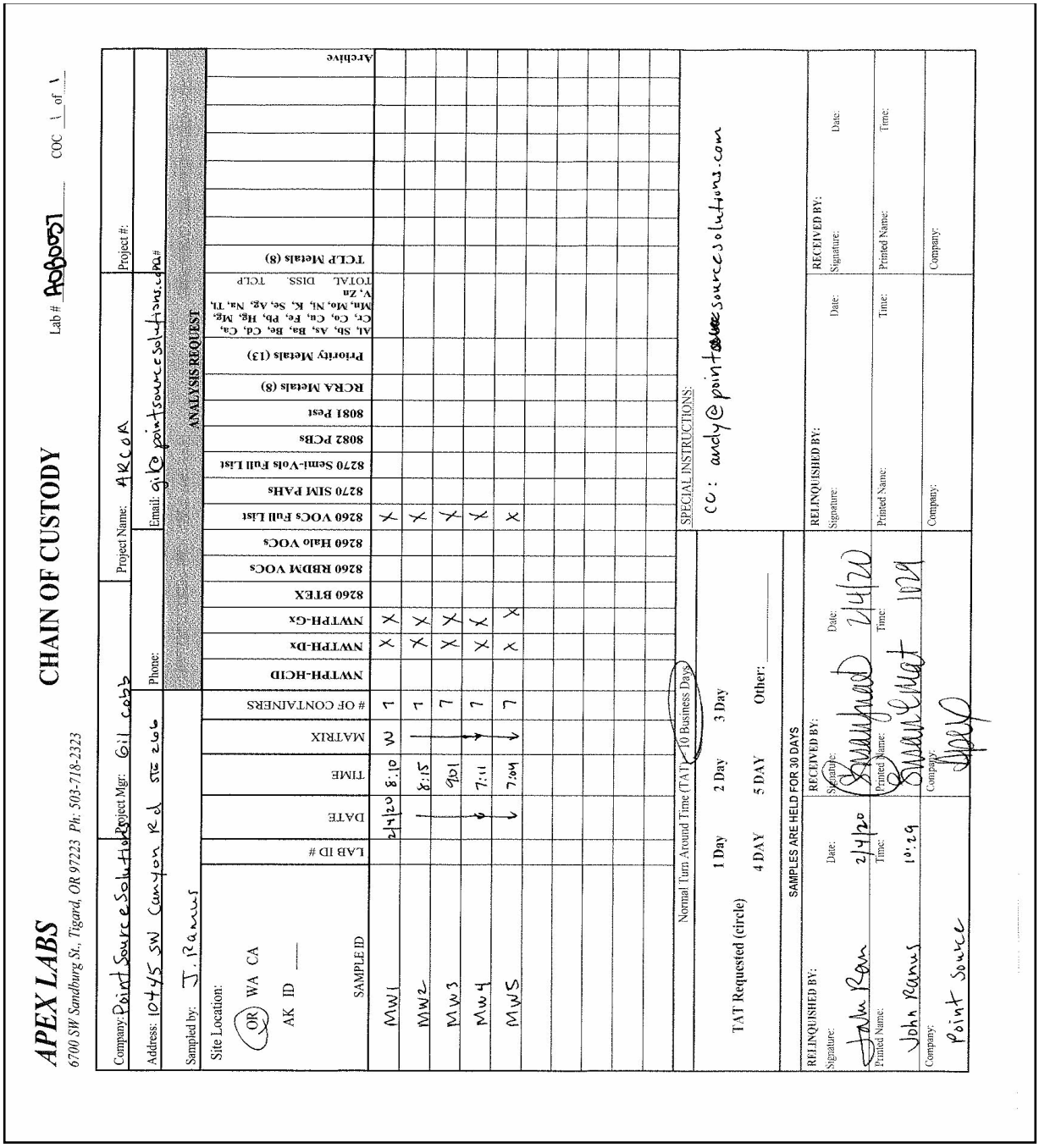

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A0B0057 COC 1 of 1

Company: Point Source Solutions Project Mgr: Gil Cobb Project Name: ARCOA Project #:
Address: 10445 SW Canyon Rd ste 205 Phone: Email: gil@pointsourcesolutions.com PO#
Sampled by: J. Ramus

Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
MW1		2/4/20	8:10	W	7		X	X				X								
MW2			8:15		7		X	X				X								
MW3			9:01		7		X	X				X								
MW4			7:11		7		X	X				X								
MW5			7:09		7		X	X				X								

Normal Turn Around Time (TAT) 10 Business Days

SPECIAL INSTRUCTIONS:
cc: andy@pointsourcesolutions.com

TAT Requested (circle)
1 Day 2 Day 3 Day
4 DAY 5 DAY Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 2/4/20	Date: 2/4/20	Date:	Date:
Time: 10:29	Time: 1129	Time:	Time:
Printed Name: John Ramus	Printed Name: Susan Hiatt	Printed Name:	Printed Name:
Company: Point Source	Company: APEX	Company:	Company:

Apex Laboratories

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Kevin J. Friscia, Project Manager

Apex Laboratories, LLC
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Point Source Solutions, LLC	Project: **Arcoa Building**	
10445 SW Canyon Road Suite 115	Project Number: **OR190501-3**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Gil Cobb**	**A0B0057 - 02 14 20 1606**

APEX LABS COOLER RECEIPT FORM

Client: Point Source Solutions Element WO#: A0B0057

Project/Project #: ARCOA

Delivery Info:

Date/time received: 2/4/20 @ 1029 By: SC

Delivered by: Apex____Client X ESS____FedEx____UPS____Swift___Senvoy ___SDS___Other_____

Cooler Inspection Date/time inspected: 2/4/20 @ 1029 By: SC

Chain of Custody included? Yes X No ___ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.8						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	~~N~~ Y (SC) 2/4/20						
Ice type: (Gel/Real/Other)	real						
Condition:	good						

Cooler out of temp? (Y/N) Possible reason why:

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 2-4-20 @ 12:35 By: TMc

All samples intact? Yes No ___ Comments:

Bottle labels/COCs agree? Yes ___ No X Comments: MW2 received 4 cont TMc 2-4-20 COC states 7, NO ~~1 on MW1, MW2, MW5~~ *See form

COC/container discrepancies form initiated? Yes* X No ___ NA ___

Containers/volumes received appropriate for analysis? Yes X No ~~X~~ TMc 2-4-20 Comments:

Do VOA vials have visible headspace? Yes ___ No ~~X~~ NA ___

Comments

Water samples: pH checked: Yes ~~X~~ No___NA___ pH appropriate? Yes ~~X~~ No___NA___

Comments:

Additional information:

Labeled by: TMc 2-4-20 Witness: XXX Cooler Inspected by: TMc See Project Contact Form: Y

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WO# A0B0057

COC/Container Discrepancies

COC Reads	Container Reads/Comments
MW1	NO TID on VOAs, NO T on Amber
MW2	NO T on VOAs, NO TID on amber
MW3	NO TID on VOAs,
MW4	NO TID on VOAs
MW5	NO T on VOAs, NO TID on amber

Apex Laboratories

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Kevin J. Friscia, Project Manager

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 14, 2018

Gil Cobb, Project Manager
Point Source Solutions
10445 SW Canyon Rd., Ste. 115
Beaverton, OR 97005

Dear Mr Cobb:

Included are the results from the testing of material submitted on May 31, 2018 from the 7/11, F&BI 805538 project. There are 12 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
PSS0614R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 31, 2018 by Friedman & Bruya, Inc. from the Point Source Solutions 7/11, F&BI 805538 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Point Source Solutions
805538 -01	SV3
805538 -02	SV4
805538 -03	SV5

Several compounds in the TO-15 laboratory control sample exceeded the acceptance criteria. These analytes were not detected in the samples, therefore the data were acceptable.

Naphthalene and hexachlorobutadiene were detected in the TO-15 method blank. The detections in the samples were flagged accordingly.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV3	Client:	Point Source Solutions
Date Received:	05/31/18	Project:	7/11, F&BI 805538
Date Collected:	05/30/18	Lab ID:	805538-01 1/10
Date Analyzed:	06/07/18	Data File:	060717.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Chlorodifluoromethane	<3.5	<1	1-Butanol	<61	<20
Propene	100	58	Carbon tetrachloride	<6.3	<1
Dichlorodifluoromethane	<4.9	<1	Benzene	<3.2	<1
Chloromethane	<2.1	<1	Cyclohexane	<69	<20
F-114	<7	<1	2-Pentanone	<35	<10
Isobutene	57	25	3-Pentanone	<35	<10
Acetaldehyde	<90	<50	Pentanal	<35	<10
Vinyl chloride	<2.6	<1	1,2-Dichloropropane	<2.3	<0.5
1,3-Butadiene	7.8	3.5	1,4-Dioxane	<3.6	<1
Bromomethane	<16	<4	Bromodichloromethane	<0.67	<0.1
Chloroethane	<2.6	<1	Trichloroethene	<2.7	<0.5
Ethanol	<75	<40	cis-1,3-Dichloropropene	<4.5	<1
Acetonitrile	<17	<10	4-Methyl-2-pentanone	<41	<10
Acrolein	<9.2	<4	trans-1,3-Dichloropropene	<4.5	<1
Acrylonitrile	<2.2	<1	Toluene	4.5	1.2
Pentane	<30	<10	1,1,2-Trichloroethane	<0.55	<0.1
Trichlorofluoromethane	<5.6	<1	3-Hexanone	<41	<10
Acetone	130	54	2-Hexanone	<41	<10
2-Propanol	<86	<35	Hexanal	<41	<10
Isoprene	<2.8	<1	Tetrachloroethene	10	1.5
Iodomethane	<5.8	<1	Dibromochloromethane	<0.85	<0.1
1,1-Dichloroethene	<4	<1	1,2-Dibromoethane (EDB)	<0.77	<0.1
Methacrolein	<29	<10	Chlorobenzene	<4.6	<1
trans-1,2-Dichloroethene	<4	<1	Ethylbenzene	<4.3	<1
Cyclopentane	<2.9	<1	1,1,2,2-Tetrachloroethane	<1.4	<0.2
Methyl vinyl ketone	<29	<10	m,p-Xylene	<8.7	<2
Butanal	<29	<10	o-Xylene	<4.3	<1
Methylene chloride	<870	<250	Styrene	<8.5	<2
CFC-113	<7.7	<1	Bromoform	<21	<2
Carbon disulfide	<62	<20	Benzyl chloride	<0.52	<0.1
Methyl t-butyl ether (MTBE)	<18	<5	1,3,5-Trimethylbenzene	<25	<5
Vinyl acetate	<70	<20	1,2,4-Trimethylbenzene	<25	<5
1,1-Dichloroethane	<4	<1	1,3-Dichlorobenzene	<6	<1
cis-1,2-Dichloroethene	<4	<1	1,4-Dichlorobenzene	<2.4	<0.4
Hexane	<35	<10	1,2,3-Trimethylbenzene	<25	<5
Chloroform	<0.49	<0.1	1,2-Dichlorobenzene	<6	<1
2-Butanone (MEK)	<29	<10	1,2,4-Trichlorobenzene	<7.4	<1
1,2-Dichloroethane (EDC)	<0.4	<0.1	Naphthalene	1.3 fb	0.24 fb
1,1,1-Trichloroethane	<5.5	<1	Hexachlorobutadiene	<2.1	<0.2

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV3	Client:	Point Source Solutions
Date Received:	05/31/18	Project:	7/11, F&BI 805538
Date Collected:	05/30/18	Lab ID:	805538-01 1/10
Date Analyzed:	06/07/18	Data File:	060717.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration ug/m3	ppbv
Gasoline Range Organics	<4,100	<1,000

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV4	Client:	Point Source Solutions
Date Received:	05/31/18	Project:	7/11, F&BI 805538
Date Collected:	05/30/18	Lab ID:	805538-02 1/10
Date Analyzed:	06/07/18	Data File:	060718.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Chlorodifluoromethane	<3.5	<1	1-Butanol	<61	<20
Propene	<6.9	<4	Carbon tetrachloride	<6.3	<1
Dichlorodifluoromethane	<4.9	<1	Benzene	<3.2	<1
Chloromethane	<2.1	<1	Cyclohexane	<69	<20
F-114	<7	<1	2-Pentanone	<35	<10
Isobutene	<9.2	<4	3-Pentanone	<35	<10
Acetaldehyde	<90	<50	Pentanal	<35	<10
Vinyl chloride	<2.6	<1	1,2-Dichloropropane	<2.3	<0.5
1,3-Butadiene	0.29	0.13	1,4-Dioxane	<3.6	<1
Bromomethane	<16	<4	Bromodichloromethane	<0.67	<0.1
Chloroethane	<2.6	<1	Trichloroethene	<2.7	<0.5
Ethanol	740	390	cis-1,3-Dichloropropene	<4.5	<1
Acetonitrile	<17	<10	4-Methyl-2-pentanone	<41	<10
Acrolein	<9.2	<4	trans-1,3-Dichloropropene	<4.5	<1
Acrylonitrile	<2.2	<1	Toluene	4.7	1.2
Pentane	<30	<10	1,1,2-Trichloroethane	<0.55	<0.1
Trichlorofluoromethane	<5.6	<1	3-Hexanone	<41	<10
Acetone	140	60	2-Hexanone	<41	<10
2-Propanol	<86	<35	Hexanal	<41	<10
Isoprene	<2.8	<1	Tetrachloroethene	10	1.5
Iodomethane	<5.8	<1	Dibromochloromethane	<0.85	<0.1
1,1-Dichloroethene	<4	<1	1,2-Dibromoethane (EDB)	<0.77	<0.1
Methacrolein	<29	<10	Chlorobenzene	<4.6	<1
trans-1,2-Dichloroethene	<4	<1	Ethylbenzene	<4.3	<1
Cyclopentane	<2.9	<1	1,1,2,2-Tetrachloroethane	<1.4	<0.2
Methyl vinyl ketone	<29	<10	m,p-Xylene	<8.7	<2
Butanal	<29	<10	o-Xylene	<4.3	<1
Methylene chloride	<870	<250	Styrene	<8.5	<2
CFC-113	<7.7	<1	Bromoform	<21	<2
Carbon disulfide	<62	<20	Benzyl chloride	<0.52	<0.1
Methyl t-butyl ether (MTBE)	<18	<5	1,3,5-Trimethylbenzene	<25	<5
Vinyl acetate	<70	<20	1,2,4-Trimethylbenzene	<25	<5
1,1-Dichloroethane	<4	<1	1,3-Dichlorobenzene	<6	<1
cis-1,2-Dichloroethene	<4	<1	1,4-Dichlorobenzene	<2.4	<0.4
Hexane	<35	<10	1,2,3-Trimethylbenzene	<25	<5
Chloroform	11	2.2	1,2-Dichlorobenzene	<6	<1
2-Butanone (MEK)	<29	<10	1,2,4-Trichlorobenzene	<7.4	<1
1,2-Dichloroethane (EDC)	<0.4	<0.1	Naphthalene	<1	<0.2
1,1,1-Trichloroethane	<5.5	<1	Hexachlorobutadiene	<2.1	<0.2

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV4	Client:	Point Source Solutions
Date Received:	05/31/18	Project:	7/11, F&BI 805538
Date Collected:	05/30/18	Lab ID:	805538-02 1/10
Date Analyzed:	06/07/18	Data File:	060718.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration ug/m3	ppbv
Gasoline Range Organics	<4,100	<1,000

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV5	Client:	Point Source Solutions
Date Received:	05/31/18	Project:	7/11, F&BI 805538
Date Collected:	05/30/18	Lab ID:	805538-03 1/10
Date Analyzed:	06/07/18	Data File:	060719.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Chlorodifluoromethane	<3.5	<1	1-Butanol	<61	<20
Propene	<6.9	<4	Carbon tetrachloride	<6.3	<1
Dichlorodifluoromethane	<4.9	<1	Benzene	<3.2	<1
Chloromethane	<2.1	<1	Cyclohexane	<69	<20
F-114	<7	<1	2-Pentanone	<35	<10
Isobutene	<9.2	<4	3-Pentanone	<35	<10
Acetaldehyde	230	130	Pentanal	<35	<10
Vinyl chloride	<2.6	<1	1,2-Dichloropropane	<2.3	<0.5
1,3-Butadiene	0.29	0.13	1,4-Dioxane	<3.6	<1
Bromomethane	<16	<4	Bromodichloromethane	<0.67	<0.1
Chloroethane	<2.6	<1	Trichloroethene	<2.7	<0.5
Ethanol	500	270	cis-1,3-Dichloropropene	<4.5	<1
Acetonitrile	<17	<10	4-Methyl-2-pentanone	<41	<10
Acrolein	<9.2	<4	trans-1,3-Dichloropropene	<4.5	<1
Acrylonitrile	<2.2	<1	Toluene	6.6	1.8
Pentane	<30	<10	1,1,2-Trichloroethane	<0.55	<0.1
Trichlorofluoromethane	<5.6	<1	3-Hexanone	<41	<10
Acetone	250	110	2-Hexanone	<41	<10
2-Propanol	<86	<35	Hexanal	<41	<10
Isoprene	<2.8	<1	Tetrachloroethene	9.0	1.3
Iodomethane	<5.8	<1	Dibromochloromethane	<0.85	<0.1
1,1-Dichloroethene	<4	<1	1,2-Dibromoethane (EDB)	<0.77	<0.1
Methacrolein	<29	<10	Chlorobenzene	17	3.7
trans-1,2-Dichloroethene	<4	<1	Ethylbenzene	6.5	1.5
Cyclopentane	<2.9	<1	1,1,2,2-Tetrachloroethane	<1.4	<0.2
Methyl vinyl ketone	<29	<10	m,p-Xylene	<8.7	<2
Butanal	<29	<10	o-Xylene	<4.3	<1
Methylene chloride	<870	<250	Styrene	<8.5	<2
CFC-113	<7.7	<1	Bromoform	<21	<2
Carbon disulfide	<62	<20	Benzyl chloride	<0.52	<0.1
Methyl t-butyl ether (MTBE)	<18	<5	1,3,5-Trimethylbenzene	<25	<5
Vinyl acetate	<70	<20	1,2,4-Trimethylbenzene	<25	<5
1,1-Dichloroethane	<4	<1	1,3-Dichlorobenzene	<6	<1
cis-1,2-Dichloroethene	<4	<1	1,4-Dichlorobenzene	8.0	1.3
Hexane	<35	<10	1,2,3-Trimethylbenzene	<25	<5
Chloroform	4.1	0.83	1,2-Dichlorobenzene	<6	<1
2-Butanone (MEK)	<29	<10	1,2,4-Trichlorobenzene	<7.4	<1
1,2-Dichloroethane (EDC)	<0.4	<0.1	Naphthalene	1.7 fb	0.32 fb
1,1,1-Trichloroethane	<5.5	<1	Hexachlorobutadiene	<2.1	<0.2

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV5	Client:	Point Source Solutions
Date Received:	05/31/18	Project:	7/11, F&BI 805538
Date Collected:	05/30/18	Lab ID:	805538-03 1/10
Date Analyzed:	06/07/18	Data File:	060719.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration ug/m3	ppbv
Gasoline Range Organics	<4,100	<1,000

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	7/11, F&BI 805538
Date Collected:	Not Applicable	Lab ID:	08-1203 mb
Date Analyzed:	06/07/18	Data File:	060708.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Chlorodifluoromethane	<0.35	<0.1	1-Butanol	<6.1	<2
Propene	<0.69	<0.4	Carbon tetrachloride	<0.63	<0.1
Dichlorodifluoromethane	<0.49	<0.1	Benzene	<0.32	<0.1
Chloromethane	<0.21	<0.1	Cyclohexane	<6.9	<2
F-114	<0.7	<0.1	2-Pentanone	<3.5	<1
Isobutene	<0.92	<0.4	3-Pentanone	<3.5	<1
Acetaldehyde	<9	<5	Pentanal	<3.5	<1
Vinyl chloride	<0.26	<0.1	1,2-Dichloropropane	<0.23	<0.05
1,3-Butadiene	<0.022	<0.01	1,4-Dioxane	<0.36	<0.1
Bromomethane	<1.6	<0.4	Bromodichloromethane	<0.067	<0.01
Chloroethane	<0.26	<0.1	Trichloroethene	<0.27	<0.05
Ethanol	<7.5	<4	cis-1,3-Dichloropropene	<0.45	<0.1
Acetonitrile	<1.7	<1	4-Methyl-2-pentanone	<4.1	<1
Acrolein	<0.92	<0.4	trans-1,3-Dichloropropene	<0.45	<0.1
Acrylonitrile	<0.22	<0.1	Toluene	<0.38	<0.1
Pentane	<3	<1	1,1,2-Trichloroethane	<0.055	<0.01
Trichlorofluoromethane	<0.56	<0.1	3-Hexanone	<4.1	<1
Acetone	<4.8	<2	2-Hexanone	<4.1	<1
2-Propanol	<8.6	<3.5	Hexanal	<4.1	<1
Isoprene	<0.28	<0.1	Tetrachloroethene	<0.68	<0.1
Iodomethane	<0.58	<0.1	Dibromochloromethane	<0.085	<0.01
1,1-Dichloroethene	<0.4	<0.1	1,2-Dibromoethane (EDB)	<0.077	<0.01
Methacrolein	<2.9	<1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Cyclopentane	<0.29	<0.1	1,1,2,2-Tetrachloroethane	<0.14	<0.02
Methyl vinyl ketone	<2.9	<1	m,p-Xylene	<0.87	<0.2
Butanal	<2.9	<1	o-Xylene	<0.43	<0.1
Methylene chloride	<87	<25	Styrene	<0.85	<0.2
CFC-113	<0.77	<0.1	Bromoform	<2.1	<0.2
Carbon disulfide	<6.2	<2	Benzyl chloride	<0.052	<0.01
Methyl t-butyl ether (MTBE)	<1.8	<0.5	1,3,5-Trimethylbenzene	<2.5	<0.5
Vinyl acetate	<7	<2	1,2,4-Trimethylbenzene	<2.5	<0.5
1,1-Dichloroethane	<0.4	<0.1	1,3-Dichlorobenzene	<0.6	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	1,4-Dichlorobenzene	<0.24	<0.04
Hexane	<3.5	<1	1,2,3-Trimethylbenzene	<2.5	<0.5
Chloroform	<0.049	<0.01	1,2-Dichlorobenzene	<0.6	<0.1
2-Butanone (MEK)	<2.9	<1	1,2,4-Trichlorobenzene	<0.74	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	Naphthalene	0.21 lc	0.040 lc
1,1,1-Trichloroethane	<0.55	<0.1	Hexachlorobutadiene	0.26 lc	0.024 lc

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	7/11, F&BI 805538
Date Collected:	Not Applicable	Lab ID:	08-1203 mb
Date Analyzed:	06/07/18	Data File:	060708.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3	ppbv
Gasoline Range Organics	<410	<100

Date of Report: 06/14/18
Date Received: 05/31/18
Project: 7/11, F&BI 805538

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chlorodifluoromethane	ppbv	10	95	70-130
Propene	ppbv	10	95	70-130
Dichlorodifluoromethane	ppbv	10	101	70-130
Chloromethane	ppbv	10	85	70-130
F-114	ppbv	10	99	70-130
Isobutene	ppbv	10	88	70-130
Acetaldehyde	ppbv	10	102	70-130
Vinyl chloride	ppbv	10	93	70-130
1,3-Butadiene	ppbv	10	90	70-130
Bromomethane	ppbv	10	132 vo	70-130
Chloroethane	ppbv	10	92	70-130
Ethanol	ppbv	10	87	70-130
Acetonitrile	ppbv	10	83	70-130
Acrolein	ppbv	10	85	70-130
Acrylonitrile	ppbv	10	102	70-130
Pentane	ppbv	10	86	70-130
Trichlorofluoromethane	ppbv	10	106	70-130
Acetone	ppbv	10	96	70-130
2-Propanol	ppbv	10	98	70-130
Isoprene	ppbv	10	93	70-130
Iodomethane	ppbv	10	107	70-130
1,1-Dichloroethene	ppbv	10	106	70-130
Methacrolein	ppbv	10	93	70-130
trans-1,2-Dichloroethene	ppbv	10	109	70-130
Cyclopentane	ppbv	10	93	70-130
Methyl vinyl ketone	ppbv	10	108	70-130
Butanal	ppbv	10	104	70-130
Methylene chloride	ppbv	10	94	70-130
CFC-113	ppbv	10	105	70-130
Carbon disulfide	ppbv	10	98	70-130
Methyl t-butyl ether (MTBE)	ppbv	10	105	70-130
Vinyl acetate	ppbv	10	97	70-130
1,1-Dichloroethane	ppbv	10	108	70-130
cis-1,2-Dichloroethene	ppbv	10	112	70-130
Hexane	ppbv	10	95	70-130
Chloroform	ppbv	10	113	70-130
2-Butanone (MEK)	ppbv	10	107	70-130
1,2-Dichloroethane (EDC)	ppbv	10	116	70-130
1,1,1-Trichloroethane	ppbv	10	127	70-130

Date of Report: 06/14/18
Date Received: 05/31/18
Project: 7/11, F&BI 805538

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample (continued)

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
1-Butanol	ppbv	10	113	70-130
Carbon tetrachloride	ppbv	10	132 vo	70-130
Benzene	ppbv	10	104	70-130
Cyclohexane	ppbv	10	96	70-130
2-Pentanone	ppbv	10	104	70-130
3-Pentanone	ppbv	10	103	70-130
Pentanal	ppbv	10	93	70-130
1,2-Dichloropropane	ppbv	10	105	70-130
1,4-Dioxane	ppbv	10	114	70-130
Bromodichloromethane	ppbv	10	124	70-130
Trichloroethene	ppbv	10	113	70-130
cis-1,3-Dichloropropene	ppbv	10	109	70-130
4-Methyl-2-pentanone	ppbv	10	110	70-130
trans-1,3-Dichloropropene	ppbv	10	116	70-130
Toluene	ppbv	10	105	70-130
1,1,2-Trichloroethane	ppbv	10	110	70-130
3-Hexanone	ppbv	10	104	70-130
2-Hexanone	ppbv	10	103	70-130
Hexanal	ppbv	10	98	70-130
Tetrachloroethene	ppbv	10	119	70-130
Dibromochloromethane	ppbv	10	142 vo	70-130
1,2-Dibromoethane (EDB)	ppbv	10	128	70-130
Chlorobenzene	ppbv	10	103	70-130
Ethylbenzene	ppbv	10	105	70-130
1,1,2,2-Tetrachloroethane	ppbv	10	111	70-130
m,p-Xylene	ppbv	20	107	70-130
o-Xylene	ppbv	10	109	70-130
Styrene	ppbv	10	103	70-130
Bromoform	ppbv	10	137 vo	70-130
Benzyl chloride	ppbv	10	139 vo	70-130
1,3,5-Trimethylbenzene	ppbv	10	102	70-130
1,2,4-Trimethylbenzene	ppbv	10	102	70-130
1,3-Dichlorobenzene	ppbv	10	114	70-130
1,4-Dichlorobenzene	ppbv	10	114	70-130
1,2,3-Trimethylbenzene	ppbv	10	104	70-130
1,2-Dichlorobenzene	ppbv	10	117	70-130
1,2,4-Trichlorobenzene	ppbv	10	102	70-130
Naphthalene	ppbv	10	107	70-130
Hexachlorobutadiene	ppbv	10	107	70-130
Gasoline Range Organics	ppbv	200	97	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

805538

ME 05-31-18

Report To Gil Cobb

Company Point Source Solutions

Address 10445 SW Canyon Rd Ste 115

City, State, ZIP Beaverton OR 97005

Phone (503) 916 9254 Email Gil@pointsource Solutions.com

SAMPLERS (*signature*) John Ren

PROJECT NAME 7/11

PO #

REPORTING LEVEL

☐ Indoor Air ☐ Deep Soil Gas

☐ Sub Slab/Soil Gas ☐ SVE/Grab

INVOICE TO

Page # _____ of _____

TURNAROUND TIME

☒ Standard

☐ RUSH _____

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other _____

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Contr. ID	Date Sampled	Field Initial Press. (Hg)	Field Initial Time	Field Final Press. (Hg)	Field Final Time	TO-15 Full Scan	TO-15 BTEXN	TO-15 cVOCs	6x	8260 VOCs	2-prop	Notes
SV3	01	3672	18	5/30/18	30	900am	5	9:07am				X	X	X	
SV4	02	3250	108	↓	29	1012am	5	1018am				X	X	X	
SV5	03	2438	224	↓	30	11:02am	5	1109am				X	X	X	
															Samples received at 2° °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: John Ren	John Ramus	PSS	5/30/18	4:24 pm
Received by:	Liz WB	FB1	5/31/18	1450
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
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(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 28, 2017

Andy Klopfenstein, Project Manager
Point Source Solutions
10445 SW Canyon Rd., Ste. 115
Beaverton, OR 97005

Dear Mr. Klopfenstein:

Included are the results from the testing of material submitted on March 15, 2017 from the 1024 SE Grand Ave OR161206-3C, F&BI 703265 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
PSS0328R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 15, 2017 by Friedman & Bruya, Inc. from the Point Source Solutions 1024 SE Grand Ave OR161206-3C, F&BI 703265 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Point Source Solutions
703265 -01	SS2

The sample did not contain of peaks indicating the presence of a Stoddard solvent range product.

The TO-15 gasoline range concentrations were quantified using a single point calibration at 200 ppbv.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SS2	Client:	Point Source Solutions
Date Received:	03/15/17	Project:	1024 SE Grand Ave OR161206-3C
Date Collected:	03/14/17	Lab ID:	703265-01 1/5
Date Analyzed:	03/17/17	Data File:	031717.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Chlorodifluoromethane	<1.8	<0.5	1-Butanol	<30	<10
Propene	<3.4	<2	Carbon tetrachloride	<3.1	<0.5
Dichlorodifluoromethane	<2.5	<0.5	Benzene	<1.6	<0.5
Chloromethane	<1	<0.5	Cyclohexane	<34	<10
F-114	<3.5	<0.5	2-Pentanone	<18	<5
Isobutene	<4.6	<2	3-Pentanone	<18	<5
Acetaldehyde	<45	<25	Pentanal	<18	<5
Vinyl chloride	<1.3	<0.5	1,2-Dichloropropane	<2.3	<0.5
1,3-Butadiene	<1.1	<0.5	1,4-Dioxane	<1.8	<0.5
Bromomethane	<1.9	<0.5	Bromodichloromethane	<3.4	<0.5
Chloroethane	<1.3	<0.5	Trichloroethene	<2.7	<0.5
Ethanol	210	110	cis-1,3-Dichloropropene	<2.3	<0.5
Acetonitrile	<8.4	<5	4-Methyl-2-pentanone	<20	<5
Acrolein	<4.6	<2	trans-1,3-Dichloropropene	<2.3	<0.5
Acrylonitrile	<1.1 ca	<0.5 ca	Toluene	5.2	1.4
Pentane	<15 ca	<5 ca	1,1,2-Trichloroethane	<2.7	<0.5
Trichlorofluoromethane	<2.8	<0.5	3-Hexanone	<20	<5
Acetone	97	41	2-Hexanone	<20	<5
2-Propanol	<43	<17	Hexanal	<20	<5
Isoprene	<1.4	<0.5	Tetrachloroethene	23	3.4
Iodomethane	<2.9	<0.5	Dibromochloromethane	<4.3	<0.5
1,1-Dichloroethene	<2	<0.5	1,2-Dibromoethane (EDB)	<3.8	<0.5
Methacrolein	<14	<5	Chlorobenzene	<2.3	<0.5
trans-1,2-Dichloroethene	<2	<0.5	Ethylbenzene	<2.2	<0.5
Cyclopentane	<1.4 ca	<0.5 ca	1,1,2,2-Tetrachloroethane	<3.4	<0.5
Methyl vinyl ketone	<5.7	<2	m,p-Xylene	7.6	1.8
Butanal	<15	<5	o-Xylene	4.1	0.95
Methylene chloride	<430	<120	Styrene	<4.3	<1
CFC-113	<3.8	<0.5	Bromoform	<10	<1
Carbon disulfide	<31	<10	Benzyl chloride	<2.6	<0.5
Methyl t-butyl ether	<1.8	<0.5	1,3,5-Trimethylbenzene	<12	<2.5
Vinyl acetate	<35 ca	<10 ca	1,2,4-Trimethylbenzene	<12	<2.5
1,1-Dichloroethane	<2	<0.5	1,3-Dichlorobenzene	<6	<1
cis-1,2-Dichloroethene	<2	<0.5	1,4-Dichlorobenzene	<3	<0.5
Hexane	<18	<5	1,2,3-Trimethylbenzene	<12	<2.5
Chloroform	<2.4	<0.5	1,2-Dichlorobenzene	<6	<1
2-Butanone (MEK)	<15	<5	1,2,4-Trichlorobenzene	<3.7	<0.5
1,2-Dichloroethane (EDC)	<2	<0.5	Naphthalene	2.6	0.50
1,1,1-Trichloroethane	<2.7	<0.5	Hexachlorobutadiene	<5.3	<0.5
Gasoline Range Organics	<2,100	<500			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	1024 SE Grand Ave OR161206-3C
Date Collected:	Not Applicable	Lab ID:	07-536 mb
Date Analyzed:	03/16/17	Data File:	031607.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Chlorodifluoromethane	<0.35	<0.1	1-Butanol	<6.1	<2
Propene	<0.69	<0.4	Carbon tetrachloride	<0.63	<0.1
Dichlorodifluoromethane	<0.49	<0.1	Benzene	<0.32	<0.1
Chloromethane	<0.21	<0.1	Cyclohexane	<6.9	<2
F-114	<0.7	<0.1	2-Pentanone	<3.5	<1
Isobutene	<0.92	<0.4	3-Pentanone	<3.5	<1
Acetaldehyde	<9	<5	Pentanal	<3.5	<1
Vinyl chloride	<0.26	<0.1	1,2-Dichloropropane	<0.46	<0.1
1,3-Butadiene	<0.22	<0.1	1,4-Dioxane	<0.36	<0.1
Bromomethane	<0.39	<0.1	Bromodichloromethane	<0.67	<0.1
Chloroethane	<0.26	<0.1	Trichloroethene	<0.54	<0.1
Ethanol	<7.5	<4	cis-1,3-Dichloropropene	<0.45	<0.1
Acetonitrile	<1.7	<1	4-Methyl-2-pentanone	<4.1	<1
Acrolein	<0.92	<0.4	trans-1,3-Dichloropropene	<0.45	<0.1
Acrylonitrile	<0.22	<0.1	Toluene	<0.38	<0.1
Pentane	<3 ca	<1 ca	1,1,2-Trichloroethane	<0.55	<0.1
Trichlorofluoromethane	<0.56	<0.1	3-Hexanone	<4.1	<1
Acetone	<4.8	<2	2-Hexanone	<4.1	<1
2-Propanol	<8.6	<3.5	Hexanal	<4.1	<1
Isoprene	<0.28	<0.1	Tetrachloroethene	<0.68	<0.1
Iodomethane	<0.58	<0.1	Dibromochloromethane	<0.85	<0.1
1,1-Dichloroethene	<0.4	<0.1	1,2-Dibromoethane (EDB)	<0.77	<0.1
Methacrolein	<2.9	<1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Cyclopentane	<0.29	<0.1	1,1,2,2-Tetrachloroethane	<0.69	<0.1
Methyl vinyl ketone	<1.1	<0.4	m,p-Xylene	<0.87	<0.2
Butanal	<2.9	<1	o-Xylene	<0.43	<0.1
Methylene chloride	<87	<25	Styrene	<0.85	<0.2
CFC-113	<0.77	<0.1	Bromoform	<2.1	<0.2
Carbon disulfide	<6.2	<2	Benzyl chloride	<0.52	<0.1
Methyl t-butyl ether	<0.36	<0.1	1,3,5-Trimethylbenzene	<2.5	<0.5
Vinyl acetate	<7	<2	1,2,4-Trimethylbenzene	<2.5	<0.5
1,1-Dichloroethane	<0.4	<0.1	1,3-Dichlorobenzene	<1.2	<0.2
cis-1,2-Dichloroethene	<0.4	<0.1	1,4-Dichlorobenzene	<0.6	<0.1
Hexane	<3.5	<1	1,2,3-Trimethylbenzene	<2.5	<0.5
Chloroform	<0.49	<0.1	1,2-Dichlorobenzene	<1.2	<0.2
2-Butanone (MEK)	<2.9	<1	1,2,4-Trichlorobenzene	<0.74	<0.1
1,2-Dichloroethane (EDC)	<0.4	<0.1	Naphthalene	<0.52	<0.1
1,1,1-Trichloroethane	<0.55	<0.1	Hexachlorobutadiene	<1.1	<0.1
Gasoline Range Organics	<410	<100			

Date of Report: 03/28/17
Date Received: 03/15/17
Project: 1024 SE Grand Ave OR161206-3C, F&BI 703265

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chlorodifluoromethane	ppbv	10	94	70-130
Propene	ppbv	10	78	70-130
Dichlorodifluoromethane	ppbv	10	93	70-130
Chloromethane	ppbv	10	94	70-130
F-114	ppbv	10	103	70-130
Isobutene	ppbv	10	93	70-130
Acetaldehyde	ppbv	10	94	70-130
Vinyl chloride	ppbv	10	100	70-130
1,3-Butadiene	ppbv	10	98	70-130
Bromomethane	ppbv	10	104	70-130
Chloroethane	ppbv	10	99	70-130
Ethanol	ppbv	10	101	70-130
Acetonitrile	ppbv	10	95	70-130
Acrolein	ppbv	10	95	70-130
Acrylonitrile	ppbv	10	71	70-130
Pentane	ppbv	10	69 vo	70-130
Trichlorofluoromethane	ppbv	10	103	70-130
Acetone	ppbv	10	97	70-130
2-Propanol	ppbv	10	99	70-130
Isoprene	ppbv	10	87	70-130
Iodomethane	ppbv	10	94	70-130
1,1-Dichloroethene	ppbv	10	91	70-130
Methacrolein	ppbv	10	84	70-130
trans-1,2-Dichloroethene	ppbv	10	92	70-130
Cyclopentane	ppbv	10	74	70-130
Methyl Vinyl Ketone	ppbv	10	100	70-130
Butanal	ppbv	10	91	70-130
Methylene chloride	ppbv	10	92	70-130
CFC-113	ppbv	10	95	70-130
Carbon disulfide	ppbv	10	91	70-130
Methyl t-butyl ether	ppbv	10	84	70-130
Vinyl acetate	ppbv	10	70	70-130
1,1-Dichloroethane	ppbv	10	88	70-130
cis-1,2-Dichloroethene	ppbv	10	88	70-130
Hexane	ppbv	10	84	70-130
Chloroform	ppbv	10	90	70-130
2-Butanone (MEK)	ppbv	10	90	70-130
1,2-Dichloroethane (EDC)	ppbv	10	86	70-130
1,1,1-Trichloroethane	ppbv	10	84	70-130
1-Butanol	ppbv	10	80	70-130
Carbon tetrachloride	ppbv	10	86	70-130

Date of Report: 03/28/17
Date Received: 03/15/17
Project: 1024 SE Grand Ave OR161206-3C, F&BI 703265

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ppbv	10	88	70-130
Cyclohexane	ppbv	10	83	70-130
2-Pentanone	ppbv	10	93	70-130
3-Pentanone	ppbv	10	93	70-130
Pentanal	ppbv	10	85	70-130
1,2-Dichloropropane	ppbv	10	94	70-130
1,4-Dioxane	ppbv	10	103	70-130
Bromodichloromethane	ppbv	10	95	70-130
Trichloroethene	ppbv	10	95	70-130
cis-1,3-Dichloropropene	ppbv	10	87	70-130
4-Methyl-2-pentanone	ppbv	10	96	70-130
trans-1,3-Dichloropropene	ppbv	10	88	70-130
Toluene	ppbv	10	94	70-130
1,1,2-Trichloroethane	ppbv	10	102	70-130
3-Hexanone	ppbv	10	94	70-130
2-Hexanone	ppbv	10	94	70-130
Hexanal	ppbv	10	89	70-130
Tetrachloroethene	ppbv	10	98	70-130
Dibromochloromethane	ppbv	10	104	70-130
1,2-Dibromoethane (EDB)	ppbv	10	101	70-130
Chlorobenzene	ppbv	10	99	70-130
Ethylbenzene	ppbv	10	97	70-130
1,1,2,2,-Tetrachloroethane	ppbv	10	100	70-130
m,p-Xylene	ppbv	20	97	70-130
o-Xylene	ppbv	10	96	70-130
Styrene	ppbv	10	94	70-130
Bromoform	ppbv	10	101	70-130
Benzyl chloride	ppbv	10	83	70-130
1,3,5-Trimethylbenzene	ppbv	10	96	70-130
1,2,4-Trimethylbenzene	ppbv	10	98	70-130
1,3-Dichlorobenzene	ppbv	10	100	70-130
1,4-Dichlorobenzene	ppbv	10	98	70-130
1,2,3-Trimethylbenzene	ppbv	10	97	70-130
1,2-Dichlorobenzene	ppbv	10	100	70-130
1,2,4-Trichlorobenzene	ppbv	10	83	70-130
Naphthalene	ppbv	10	84	70-130
Hexachlorobutadiene	ppbv	10	89	70-130
Gasoline Range Organics	ppbv	10	97	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

703265

SAMPLE CHAIN OF CUSTODY

ME 03/15/17

Page # 1 of 1

Report To Andy Klopfenstein
Company Point Source Solutions
Address 10445 SW Canyon Rd Ste 115
City, State, ZIP Beaverton, OR 97005
Phone 503-780-1569 Email Andy@pointsourcesolutions.com

SAMPLERS (*signature*)

PROJECT NAME	PO #
1024 SE Grand Ave	OR16120-3C
REMARKS pe AK 3/14/17 AS	INVOICE TO

TURNAROUND TIME
☐ Standard
☒ RUSH 5 day
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Contr. ID	Date Sampled	Field Initial Press. (Hg)	Field Initial Time	Field Final Press. (Hg)	Field Final Time	TO-15 Full Scan	TO-15 BTEXN	TO-15 cVOCs	6x 1,2 DCA	Notes
SS2	01	2294	FB106	3/14/17	29.5	10:06	5	10:12	X			X	need standard solvents
													Samples received at 20c

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:				
Received by:	Khan Phan	FcBT	3/15/17	1400
Relinquished by:				
Received by:				

FORMS\COC\COCTO-15.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 7, 2020

Andy Klopfenstein, Project Manager
Point Source Solutions
10445 SW Canyon Rd., Ste. 115
Beaverton, OR 97005

Dear Mr Klopfenstein:

Included are the results from the testing of material submitted on December 18, 2019 from the Arcoa Building, F&BI 912331 project. There are 10 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
PSS0107R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 18, 2019 by Friedman & Bruya, Inc. from the Point Source Solutions Arcoa Building, F&BI 912331 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Point Source Solutions
912331 -01	SV1
912331 -02	SS1

Several APH ranges and TO-15 compounds exceeded the calibration range in sample SV1. The data were flagged accordingly.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SV1	Client:	Point Source Solutions
Date Received:	12/18/19	Project:	Arcoa Building, F&BI 912331
Date Collected:	12/17/19	Lab ID:	912331-01 1/38
Date Analyzed:	12/31/19	Data File:	123046.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	BAT

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	440,000 ve
APH EC9-12 aliphatics	770,000 ve
APH EC9-10 aromatics	46,000 ve

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	Arcoa Building, F&BI 912331
Date Collected:	Not Applicable	Lab ID:	09-3151 mb
Date Analyzed:	12/31/19	Data File:	123030.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	BAT

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<46
APH EC9-12 aliphatics	<35
APH EC9-10 aromatics	<25

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV1	Client:	Point Source Solutions
Date Received:	12/18/19	Project:	Arcoa Building, F&BI 912331
Date Collected:	12/17/19	Lab ID:	912331-01 1/38
Date Analyzed:	12/31/19	Data File:	123046.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	BAT

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Propene	510	300	1,2-Dichloropropane	190	41
Dichlorodifluoromethane	<19	<3.8	1,4-Dioxane	<14	<3.8
Chloromethane	<78	<38	2,2,4-Trimethylpentane	<180	<38
F-114	<27	<3.8	Methyl methacrylate	<160	<38
Vinyl chloride	<9.7	<3.8	Heptane	<160	<38
1,3-Butadiene	33	15	Bromodichloromethane	<2.5	<0.38
Butane	<90	<38	Trichloroethene	220	41
Bromomethane	<59	<15	cis-1,3-Dichloropropene	<17	<3.8
Chloroethane	<100	<38	4-Methyl-2-pentanone	<160	<38
Vinyl bromide	<17	<3.8	trans-1,3-Dichloropropene	<17	<3.8
Ethanol	<290	<150	Toluene	<720	<190
Acrolein	<35	<15	1,1,2-Trichloroethane	<4.1	<0.76
Pentane	<110	<38	2-Hexanone	<160	<38
Trichlorofluoromethane	<85	<15	Tetrachloroethene	1,500	220
Acetone	<180	<76	Dibromochloromethane	<3.2	<0.38
2-Propanol	<330	<130	1,2-Dibromoethane (EDB)	<2.9	<0.38
1,1-Dichloroethene	<15	<3.8	Chlorobenzene	<17	<3.8
trans-1,2-Dichloroethene	<15	<3.8	Ethylbenzene	610	140
Methylene chloride	<3,300	<950	1,1,2,2-Tetrachloroethane	<5.2	<0.76
t-Butyl alcohol (TBA)	<460	<150	Nonane	37,000 ve	7,000 ve
3-Chloropropene	<48	<15	Isopropylbenzene	1,100	220
CFC-113	<29	<3.8	2-Chlorotoluene	<200	<38
Carbon disulfide	<240	<76	Propylbenzene	1,700	340
Methyl t-butyl ether (MTBE)	<69	<19	4-Ethyltoluene	6,400 ve	1,300 ve
Vinyl acetate	<270	<76	m,p-Xylene	1,200	280
1,1-Dichloroethane	<15	<3.8	o-Xylene	1,500	340
cis-1,2-Dichloroethene	<15	<3.8	Styrene	<32	<7.6
Hexane	<130	<38	Bromoform	<79	<7.6
Chloroform	<1.9	<0.38	Benzyl chloride	<2	<0.38
Ethyl acetate	<270	<76	1,3,5-Trimethylbenzene	8,400 ve	1,700 ve
Tetrahydrofuran	<11	<3.8	1,2,4-Trimethylbenzene	7,800 ve	1,600 ve
2-Butanone (MEK)	<110	<38	1,3-Dichlorobenzene	<23	<3.8
1,2-Dichloroethane (EDC)	<1.5	<0.38	1,4-Dichlorobenzene	<9.1	<1.5
1,1,1-Trichloroethane	<21	<3.8	1,2-Dichlorobenzene	<23	<3.8
Carbon tetrachloride	<24	<3.8	1,2,4-Trichlorobenzene	<28	<3.8
Benzene	240	76	Naphthalene	<10	<1.9
Cyclohexane	<260	<76	Hexachlorobutadiene	<8.1	<0.76
Gasoline Range Organics	1,500,000	360,000			

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SS1	Client:	Point Source Solutions
Date Received:	12/18/19	Project:	Arcoa Building, F&BI 912331
Date Collected:	12/17/19	Lab ID:	912331-02 1/3.4
Date Analyzed:	12/31/19	Data File:	123052.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	BAT

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	103	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Propene	<2.3	<1.4	1,2-Dichloropropane	<0.79	<0.17
Dichlorodifluoromethane	2.4	0.49	1,4-Dioxane	<1.2	<0.34
Chloromethane	<7	<3.4	2,2,4-Trimethylpentane	<16	<3.4
F-114	<2.4	<0.34	Methyl methacrylate	<14	<3.4
Vinyl chloride	<0.87	<0.34	Heptane	<14	<3.4
1,3-Butadiene	<0.075	<0.034	Bromodichloromethane	<0.23	<0.034
Butane	<8.1	<3.4	Trichloroethene	3.6	0.68
Bromomethane	<5.3	<1.4	cis-1,3-Dichloropropene	<1.5	<0.34
Chloroethane	<9	<3.4	4-Methyl-2-pentanone	<14	<3.4
Vinyl bromide	<1.5	<0.34	trans-1,3-Dichloropropene	<1.5	<0.34
Ethanol	110	59	Toluene	<64	<17
Acrolein	<3.1	<1.4	1,1,2-Trichloroethane	<0.37	<0.068
Pentane	<10	<3.4	2-Hexanone	<14	<3.4
Trichlorofluoromethane	<7.6	<1.4	Tetrachloroethene	<23	<3.4
Acetone	44	18	Dibromochloromethane	<0.29	<0.034
2-Propanol	<29	<12	1,2-Dibromoethane (EDB)	<0.26	<0.034
1,1-Dichloroethene	<1.3	<0.34	Chlorobenzene	<1.6	<0.34
trans-1,2-Dichloroethene	<1.3	<0.34	Ethylbenzene	<1.5	<0.34
Methylene chloride	<300	<85	1,1,2,2-Tetrachloroethane	<0.47	<0.068
t-Butyl alcohol (TBA)	<41	<14	Nonane	<18	<3.4
3-Chloropropene	<4.3	<1.4	Isopropylbenzene	<8.4	<1.7
CFC-113	<2.6	<0.34	2-Chlorotoluene	<18	<3.4
Carbon disulfide	<21	<6.8	Propylbenzene	<8.4	<1.7
Methyl t-butyl ether (MTBE)	<6.1	<1.7	4-Ethyltoluene	<8.4	<1.7
Vinyl acetate	<24	<6.8	m,p-Xylene	3.2	0.73
1,1-Dichloroethane	<1.4	<0.34	o-Xylene	<1.5	<0.34
cis-1,2-Dichloroethene	<1.3	<0.34	Styrene	<2.9	<0.68
Hexane	<12	<3.4	Bromoform	<7	<0.68
Chloroform	14	2.9	Benzyl chloride	<0.18	<0.034
Ethyl acetate	<25	<6.8	1,3,5-Trimethylbenzene	<8.4	<1.7
Tetrahydrofuran	<1	<0.34	1,2,4-Trimethylbenzene	<8.4	<1.7
2-Butanone (MEK)	<10	<3.4	1,3-Dichlorobenzene	<2	<0.34
1,2-Dichloroethane (EDC)	0.15	0.037	1,4-Dichlorobenzene	<0.82	<0.14
1,1,1-Trichloroethane	<1.9	<0.34	1,2-Dichlorobenzene	<2	<0.34
Carbon tetrachloride	2.7	0.42	1,2,4-Trichlorobenzene	<2.5	<0.34
Benzene	<1.1	<0.34	Naphthalene	<0.89	<0.17
Cyclohexane	<23	<6.8	Hexachlorobutadiene	<0.73	<0.068
Gasoline Range Organics	<2,800	<6,800			

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Point Source Solutions
Date Received:	Not Applicable	Project:	Arcoa Building, F&BI 912331
Date Collected:	Not Applicable	Lab ID:	09-3151 mb
Date Analyzed:	12/31/19	Data File:	123030.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	BAT

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration ug/m3	Concentration ppbv	Compounds:	Concentration ug/m3	Concentration ppbv
Propene	<0.69	<0.4	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.49	<0.1	1,4-Dioxane	<0.36	<0.1
Chloromethane	<2.1	<1	2,2,4-Trimethylpentane	<4.7	<1
F-114	<0.7	<0.1	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.022	<0.01	Bromodichloromethane	<0.067	<0.01
Butane	<2.4	<1	Trichloroethene	<0.27	<0.05
Bromomethane	<1.6	<0.4	cis-1,3-Dichloropropene	<0.45	<0.1
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.1	<1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<19	<5
Acrolein	<0.92	<0.4	1,1,2-Trichloroethane	<0.11	<0.02
Pentane	<3	<1	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<87	<25	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<1.3	<0.4	Isopropylbenzene	<2.5	<0.5
CFC-113	<0.77	<0.1	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<2.5	<0.5
Methyl t-butyl ether (MTBE)	<1.8	<0.5	4-Ethyltoluene	<2.5	<0.5
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<2.5	<0.5
Tetrahydrofuran	<0.29	<0.1	1,2,4-Trimethylbenzene	<2.5	<0.5
2-Butanone (MEK)	<2.9	<1	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.24	<0.04
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.63	<0.1	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02
Gasoline Range Organics	<820	<200			

Date of Report: 01/07/20
Date Received: 12/18/19
Project: Arcoa Building, F&BI 912331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD MA-APH

Laboratory Code: 912417-09 1/2.9 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	3,400	3,500	3
APH EC9-12 aliphatics	ug/m3	1,300	1,400	7
APH EC9-10 aromatics	ug/m3	<72	<72	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	23	86	70-130
APH EC9-12 aliphatics	ug/m3	23	109	70-130
APH EC9-10 aromatics	ug/m3	23	99	70-130

Date of Report: 01/07/20
Date Received: 12/18/19
Project: Arcoa Building, F&BI 912331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ppbv	5	98	70-130
Dichlorodifluoromethane	ppbv	5	103	70-130
Chloromethane	ppbv	5	94	70-130
F-114	ppbv	5	103	70-130
Vinyl chloride	ppbv	5	103	70-130
1,3-Butadiene	ppbv	5	112	70-130
Butane	ppbv	5	101	70-130
Bromomethane	ppbv	5	97	70-130
Chloroethane	ppbv	5	103	70-130
Ethanol	ppbv	5	104	70-130
Acrolein	ppbv	5	101	70-130
Pentane	ppbv	5	100	70-130
Trichlorofluoromethane	ppbv	5	101	70-130
Acetone	ppbv	5	95	70-130
2-Propanol	ppbv	5	103	70-130
1,1-Dichloroethene	ppbv	5	105	70-130
trans-1,2-Dichloroethene	ppbv	5	103	70-130
Methylene chloride	ppbv	5	90	70-130
t-Butyl alcohol (TBA)	ppbv	5	102	70-130
3-Chloropropene	ppbv	5	100	70-130
CFC-113	ppbv	5	102	70-130
Carbon disulfide	ppbv	5	97	70-130
Methyl t-butyl ether (MTBE)	ppbv	5	107	70-130
Vinyl acetate	ppbv	5	98	70-130
1,1-Dichloroethane	ppbv	5	99	70-130
cis-1,2-Dichloroethene	ppbv	5	104	70-130
Hexane	ppbv	5	116	70-130
Chloroform	ppbv	5	99	70-130
Ethyl acetate	ppbv	5	97	70-130
Tetrahydrofuran	ppbv	5	104	70-130
2-Butanone (MEK)	ppbv	5	100	70-130
1,2-Dichloroethane (EDC)	ppbv	5	103	70-130
1,1,1-Trichloroethane	ppbv	5	98	70-130
Carbon tetrachloride	ppbv	5	102	70-130
Benzene	ppbv	5	98	70-130
Cyclohexane	ppbv	5	98	70-130
1,2-Dichloropropane	ppbv	5	93	70-130
1,4-Dioxane	ppbv	5	94	70-130
2,2,4-Trimethylpentane	ppbv	5	100	70-130
Methyl methacrylate	ppbv	5	102	70-130

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Heptane	ppbv	5	106	70-130
Bromodichloromethane	ppbv	5	90	70-130
Trichloroethene	ppbv	5	92	70-130
cis-1,3-Dichloropropene	ppbv	5	99	70-130
4-Methyl-2-pentanone	ppbv	5	111	70-130
trans-1,3-Dichloropropene	ppbv	5	107	70-130
Toluene	ppbv	5	99	70-130
1,1,2-Trichloroethane	ppbv	5	96	70-130
2-Hexanone	ppbv	5	109	70-130
Tetrachloroethene	ppbv	5	91	70-130
Dibromochloromethane	ppbv	5	91	70-130
1,2-Dibromoethane (EDB)	ppbv	5	98	70-130
Chlorobenzene	ppbv	5	102	70-130
Ethylbenzene	ppbv	5	105	70-130
1,1,2,2-Tetrachloroethane	ppbv	5	92	70-130
Nonane	ppbv	5	119	70-130
Isopropylbenzene	ppbv	5	100	70-130
2-Chlorotoluene	ppbv	5	108	70-130
Propylbenzene	ppbv	5	106	70-130
4-Ethyltoluene	ppbv	5	123	70-130
m,p-Xylene	ppbv	10	108	70-130
o-Xylene	ppbv	5	105	70-130
Styrene	ppbv	5	113	70-130
Bromoform	ppbv	5	97	70-130
Benzyl chloride	ppbv	5	109	70-130
1,3,5-Trimethylbenzene	ppbv	5	113	70-130
1,2,4-Trimethylbenzene	ppbv	5	119	70-130
1,3-Dichlorobenzene	ppbv	5	107	70-130
1,4-Dichlorobenzene	ppbv	5	107	70-130
1,2-Dichlorobenzene	ppbv	5	99	70-130
1,2,4-Trichlorobenzene	ppbv	5	99	70-130
Naphthalene	ppbv	5	104	70-130
Hexachlorobutadiene	ppbv	5	101	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

912331 ME 12/18/19

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Report To Andy Klopfenstein
Company Point Source Solutions
Address 10445 SW Canyon Rd #266
City, State, ZIP Beaverton, OR 97005
Phone 503-780-1569 Email Andy@...

SAMPLERS (*signature*)

PROJECT NAME & ADDRESS: Arcoa Building

PO #

NOTES:

INVOICE TO

TURNAROUND TIME
☒ Standard
☒ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Archive Samples
☐ Other

SAMPLE INFORMATION										ANALYSIS REQUESTED						
Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	TPH-GX	Notes
SV1	01	3255	230	IA / (SG)	12/17/19	30	6:09	5	6:16	X			(X)		X	(X) - per AK
SS1	02	3677	204	IA / (SG)	"	29	7:08	5	7:14	X					X	1/3/20 ME
				IA / SG												
				IA / SG												
				IA / SG												
				IA / SG												
				IA / SG												
				IA / SG												

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	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		A. Klopfenstein	P.S.S.	12/17/19	14:30
Received by:		James Bruya	F&B	12/18	7:50
Relinquished by:					
Received by:			Samples received at 19 °C		

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