CONTAMINATED MEDIA MANAGEMENT PLAN

Williams + Russell Development
The Homeownership Parcel, Black Business Hub Parcel, and Affordable Apartments Parcel

The Development is Bound by N Knott Street to the North, N Williams Avenue to the East, N Russell Street to the South and N Vancouver Avenue to the West
(Tax Lot 1N1E27AC 4100 and a portion of Tax Lot 1N1E27AC 1800)

Portland, Oregon 97227

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Prepared For

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1. PURPOSE

The purpose of this Contaminated Media Management Plan (CMMP) is to ensure that excavated fill material and/or native soils generated during future redevelopment of the Williams + Russell property are managed and disposed of in compliance with applicable regulations and in a manner that minimizes potential risks to human health and the environment.

The Williams + Russell property consists of a vacant, 2.24-acre city block and the southern portion of N Knott St (no situs, Tax Lot 1N1E27AC 4100). The property is bound by the remainder of N Knott St to the north, N Williams Ave to the east, N Russell St to the south and N Vancouver Ave to the west in Portland, Oregon (Figures 1 and 2). The property will be divided into three parcels and developed by three separate owners as follows:

- A townhome development that will provide affordable home ownership on the northern portion of the block ("Homeownership Parcel"),
- A four-story office building with retail spaces and plaza on the eastern portion of the block ("Black Business Hub Parcel"), and
- A six-story affordable apartment building on the southwest corner of the block ("Affordable Apartments Parcel").

A site plan showing the Homeownership Parcel, the Black Business Hub Parcel, and Affordable Apartments Parcel is attached (Figure 3).

The property will be developed in stages. The first stage is the grading of the entire property scheduled to begin March 2025, immediately followed by the second stage, the development of the Homeownership Parcel. The third and fourth stages are the developments of the Black Business Hub Parcel and Affordable Apartments Parcel at later dates.

This CMMP was developed specifically for use across the entire property during grading (the first stage), and for use within each parcel (stages two through four). This CMMP is based on currently known, existing site conditions where the following areas or items of environmental concern were identified:

- Fill material was encountered in surface soils (i.e., upper 3.5 to 5.5 feet) across the entire property, and deeper fill material extended to depths of approximately 8 feet and 12 feet below the eastern portion of the property.

- Although not identified by a geophysical survey, it is possible the following items may be encountered during property redevelopment activities:

- Former heating oil underground storage tanks (HOTs) associated with former residences, church, and commercial buildings across the property;
- Former drywells and privy pits associated with former residences and commercial operations across the property;
- Former drywells, dispenser island, and underground storage tanks (USTs) associated with former gas station operations at the southwest corner of the property.

The current understanding of the site conditions was based on the results from a 2023 Phase I Environmental Site Assessment (ESA) that includes findings from a 2020 Phase I ESA), and a 2020 Phase II ESA prepared by Coles & Betts Environmental Consulting, LLC (C+BEC) (see *Section 15, References*), and C+BEC's field oversight of a 2023 geotechnical investigation by Columbia West Engineering. This CMMP will be updated should other types of contamination or other hazards be encountered during future site activities.

2. PROPERTY DESCRIPTION

The property is the entire vacant, 2.24-acre city block and the southern half of N Knott St bound by the northern half of N Knott St to the north, N Williams Ave to the east, N Russell St to the south and N Vancouver Ave to the west. The property is located in Portland, Multnomah County, Oregon and is composed of two tax lots: Tax Lot 1N1E27AC 4100 and a portion of Tax Lot 1N1E27AC 1800. The property slopes gently downward to the southwest from 164 feet above mean sea level (msl) at the northeast corner to 155 feet above msl at the southwest corner. Two asphalt aprons leading to/from N Knott St are on the north side of the property.

Beyond N Knott St are a medical office parking lot and a vacant lot. N Williams Ave bounds the property to the east, beyond which are multiple residential properties. A mid-rise residential building is located southeast of the property beyond the intersection of N Russell St and N Williams Ave, and residences are also located northeast of the property beyond the intersection of N Knott St and N Williams Ave. A commercial property bound the property to the south beyond N Russell St, with one multi-story building that is both commercial and residential use. Two commercial buildings and their associated parking lots are located southwest of the property beyond the intersection of N Vancouver Ave and N Russell St. A surface level parking lot and multi-story parking lot building are west and northwest of the property beyond N Vancouver Ave and the intersection of N Knott St and N Vancouver Ave, respectively.

3. PROPERTY HISTORY

The property's historical operations include:

- Dry cleaners near the southeast corner and east-central perimeter of the property from at least 1950 through 1960,
- An auto/gas station on the southwest corner of the property in at least 1935 and 1940,
- Cattle and insect powder manufacturing in the early 1900s near the southwest corner of the property,
- Paints and wallpaper and tinning within the south-central property area between at least 1924 and 1950, and early 1900s, respectively; and
- Miscellaneous manufacturing activities.

All former buildings on the property were demolished before or by the late 1960s, and Legacy Health has owned the property since the 1970s. The property has remained vacant as it is today since the demolition activities in the late 1960s, and in recent years was used on an annual basis for neighborhood events. Distressed vegetation observed during the 2020 Phase I ESA site reconnaissance was likely related to high foot-traffic areas during these neighborhood events.

Historical uses of adjacent properties included cleaners and dyeing, electroplating, wallpaper and paints to the north; paints and laundry to the east; automobile repair and paint shop, scrap metal, and machine shop to the south; and a photo shop, auto body shop, and auto service / gas station to the west.

The locations of historical commercial operations of environmental concern and locations of distressed vegetation on the property are shown in Figure 4.

4. PREVIOUS INVESTIGATIONS

The previous investigations completed on the property include:

- A Phase II ESA with a geophysical survey and soil and soil gas sampling activities to investigate the 2020 Phase I ESA Recognized Environmental Conditions (RECs):
    - Determining whether USTs, drywells or fill materials are present on the property,
    - Documenting whether historical on- and off-site practices have impacted the soil and/or soil vapor on the property,

- Determining whether contamination is present above the appropriate DEQ RBCs for future excavation and construction workers, and future building occupants, and
- Determining whether soil disturbed during future site redevelopment activities requires disposal at a regulated landfill.

Geophysical survey activities completed on August 20 and 21, 2020, and drilling with soil and soil gas sampling activities completed on December 7 and 8, 2020.

C+BEC also completed environmental monitoring and sampling (i.e., oversight) activities during Columbia West Engineering's geotechnical drilling activities on July 31 and August 1, 2023.

The findings of these investigations are summarized below.

4.1 Phase II ESA Geophysical Survey Findings

The geophysical survey was completed by Pacific Geophysics of Portland, Oregon, to identify evidence of USTs and drywells associated with the former service station and buildings. Pacific Geophysics completed a magnetic survey and a ground penetrating radar (GPR) survey across the property, including the southern half of N Knott St and the adjacent sidewalks.

The property was traversed along survey lines set five feet apart for the GPR survey. The data quality allowed detection of features within the top 2 to 3 feet bgs.

The magnetic survey may have missed a small tank adjacent (if present) to the following objects due to magnetic interference: utility poles, metallic street signs and bollards.

Pacific Geophysics did not find evidence of USTs (both the former service station tanks and any former heating oil tanks), nor drywells. Several large "flat" zones were detected just below the ground surface, and they may be remnants of slab building floors. One disturbed soil zone was detected, and it may be associated with a former excavation. They did not appear to contain metal.

A map showing items of environmental concern with an overlay of the geophysical survey results are in Figures 5 and 6. The geophysical survey report is in Appendix A.

4.2 Phase II ESA Soil Findings

Twenty-five borings (B1 through B25) were spaced at regular intervals throughout the property based on historical building locations, at down-gradient locations relative to

adjacent contaminated sites, and at locations where fill material was encountered (Figure 6). The boring depths, descriptions of the soil and/or fill material encountered, and field screening observations (odor, discoloration, and/or photoionization [PID] readings) are summarized in the table below. The discrepancy between the total depth drilled and the deepest sample depths are due to incomplete sample recovery (e.g., B1 was installed to 20 feet bgs, but media descriptions are to 19 feet bgs). Groundwater was not encountered during drilling activities.

Boring	Depth of Media (feet bgs)	Odor	Sheen	Discoloration	PID Reading (ppm)	Fill Material Observations
B1	0.0-1.5 Fill 1.5-15.8 Silt 15.8-16.3 Silty Sand 16.3-19.0 Silty Sand	- - - -	- - - -	- - - -	- - - -	Fill is silt with gravel
B2	0.0-0.5 Fill 0.5-4 Silty Sand	- -	- -	- -	- -	Fill is silt
B3	0.0-1.2 Fill 1.2-4.0 Sandy Silt 4.0-5.0 Silty Sand	- - -	- - -	- - -	- - -	Fill is silt
B4	0.0-2.0 Fill 2.0-8.0 Silt	- -	- -	- -	- -	Fill is gravel with silt
B5	0.0-2.5 Fill 2.5-9.0 Silty Sand	- -	- -	- -	- -	Fill is silt with brick, burnt wood
B6	0.0-1.7 Fill 1.7-5.0 Silt 6.0-8.5 Silty Sand	- - -	- - -	- - -	0.1 - 3.6 - -	Fill is silt with concrete
B7	0.0-0.4 Fill 0.4-2.5 Sandy Silt 2.5-9.5 Silty Sand	- - -	- - -	- - -	- - -	Fill is sandy silt with gravel
B8	0.0-4.0 Fill 5.0-9.5 Silt Sand	- -	- -	- -	- -	Fill is silt with concrete, brick, sand, wood debris
B9	0.0-1.4 Fill 1.4-7.5 Silty Sand	- -	- -	Dark Gray -	- -	Fill is silt with brick, gravel
B10	0.0-2.0 Fill 2.0-9.0 Silty Sandy	- -	- -	- -	- -	Fill is silt with brick, concrete
B11	0.0-1.5 Fill 1.5-5.0 Silt 5.0-8.0 Silty Sand	- - -	- - -	- - -	- - -	Fill is silt with sand, wood
B12	0.0-3.0 Fill 5.0-9.0 Silty Sand	- -	- -	Black -	- -	Fill is silt with black sandy material, brick, white material
B13	0.0-8.4 Fill 8.4-19.5 Silty Sand	- -	- -	- -	- -	Fill is silt with brick, concrete, black sandy material, wood debris
B14	0.0-8.2 Fill 8.2-9.5 Silty Sand	- -	- -	Black -	- -	Fill is silt with gravel, coarse sand, coarse black sandy material, brick

Boring	Depth of Media (feet bgs)	Odor	Sheen	Discoloration	PID Reading (ppm)	Fill Material Observations
B15	0.0-9.0 Fill 9.0-18.5 Silty Sand 18.5-19.0 Sandy Silt	- - -	- - -	Gray (7.5-8.5) - -	- - -	Fill is silt and clayey silt with gravel, glass, brick. Charcoal at 8.5 ft
B16	0.0-8.0 Fill 9.0-10.0 Concrete 10.0-14.0 Silty Sand	- - -	- - -	Gray (5.5-6.5) - -	- - -	Fill is silt with glass, brick, concrete, gravel
B17	0.0-11.5 Fill 11.5-11.8 Concrete 11.8-15.0	- - -	- - -	Gray 7.1-7.4 - -	- - -	Fill is silt with ceramic pieces, sand, crushed concrete
B18	0.0-5.5 Fill 5.5-9.5 Silty Sand	- -	- -	- -	8.0 -	Fill is silt
B19	0.0-12.0 Fill 12.0-15.0 Silty Sand	- -	- -	Dark Gray (5.5 to 12) -	1.0 -	Fill is silt with metal pieces at 3 ft, minor brick fragments, charred wood and ceramic pieces
B20	0.0-12.0 Fill 12.0-14 Silty Sand	- -	- -	- -	- -	Fill is silt with charred wood debris at 7.5 ft and gravel at 9.8 ft.
B21	0.5-6.5 Fill 6.5-9.0 Silty Sand	- -	- -	- -	- -	Fill is silty sand
B22	0.0-6.3 Fill 6.3 to 9.5 Silty Sand	- -	- -	- -	- -	Fill is silty sand, inch of white powder/ mortar at 9 inches bgs
B23	0.5-5.5 Fill 5.5-9 Silty Sand	- -	- -	- -	- -	Fill is brown silty sand
B24	0.0-5.5 Fill 5.5-9.5 Silty Sand	- -	- -	- -	- -	Fill is silt with gravel, includes brick, mortar, burned wood
B25	0.0-6.0 Fill 6.0-9.0 Silty Sand	- -	- -	- -	- -	Fill is silty sand

Note: "-" indicates not observed. For PID reading, "-" indicates a reading of 0.0 ppm.

Shallow soils in the upper 3.5 feet bgs consisted of fill material across the entire property and individual soil samples were composited into six composite groups (C001 through C006) by the laboratory as directed by C+BEC. The shallow soils' composite groups' areas' boundaries are indicated on Figure 7. Not all boring locations show in Figure 7 were used in the composite samples. The individual samples selected for each composite group were selected by their locations relative to areas of environmental concern and on their similar characteristics as follows:

Composite Group	Sample(s) Within the Composite Group
C001	B24 1.5-2.9
C002	B25 0.5-1, B7 0.5-1, B23 2-2.5, B22 3-3.5, B21 1-2, and B18 0.5-1.5
C003	B1 3-3.5, B5 0.5-1, B6 0.5-1, B2 0.5-1, B9 0.5-1, and B10 2-2.5
C004	B8 1-1.5, B11 1-1.5, and B12 1-1.5
C005	B17 0.5-1.5 and B20 0.7-1.5
C006	B13 1-2, B14 0.5-1, and B15 0.5-1

The soil samples were analyzed for:

- Gasoline-range petroleum hydrocarbons by Method NWTPH-Gx;
- Diesel- and oil-range petroleum hydrocarbons by Method NWTPH-Dx;
    - If diesel- and/or oil-range petroleum hydrocarbons were detected, "worst case" soil samples were analyzed for:
        - Polychlorinated biphenyls (PCBs) by EPA Method 8082A and/or
        - Semivolatile Organic Compounds (SVOCs) by EPA Method 8270E.
- Volatile Organic Compounds (VOCs) by EPA Method 8260C;
- Total Resource Conservation and Recovery Act (RCRA)-8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) by EPA Method 6010; and
    - Total Toxicity Characteristic Leaching Procedure (TCLP) by EPA Method 6020B (ICPMS) for lead above 100 mg/kg (the "20 times" rule for hazardous waste characterization).
- Organochlorine pesticides by EPA Method 8081B.

The contaminants of concern on the property, as based on soil laboratory results are metals, oil-range petroleum hydrocarbons, VOCs, and SVOCs. The analytical data indicates:

- The potential off-site contaminants related to historical operations adjacent to the property do not appear to have migrated onto the property.
- Soil vapor laboratory data indicate VOCs intruding into future structures on the property are not currently of environmental concern.
- Fill material was encountered to 5.5 feet bgs at the northwestern corner of the property, between 0.5 and 6.5 feet bgs in the north central portion of the

property, between 8 and 12 feet bgs on the eastern portion of the property, and between 0.5 and 4 feet bgs on the southwestern- and southcentral-portions of the property.

- The majority of shallow soils across the property (i.e., between approximately 0.5 and 3.5 feet bgs) exceed DEQ RBCs and/or Clean Fill Criteria as summarized below and in Figure 7.

    - DEQ Clean Fill Criteria was exceeded across the entire property for metals (arsenic, cadmium, lead and mercury; and possibly selenium due to elevated laboratory reporting limits above DEQ Clean Fill Criteria), oil-range petroleum hydrocarbons, VOCs and SVOCs. Laboratory analyses of shallow soils indicate most contain low levels of oil-range petroleum hydrocarbons that would prevent their use as clean fill offsite and if left on-site, would require special handling (e.g., capping with asphalt or the building foundation). Based on these data, shallow soils on the property will require disposal at a regulated landfill if disturbed during site redevelopment activities.

    - DEQ RBCs for Soil Ingestion, Dermal Contact, and Inhalation for urban residential, occupational, construction worker and/or excavation worker were exceeded in shallow soils for arsenic, lead, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and/or naphthalene in composite groupings C001, C002, C004 and C006. These exceedances require construction and excavation workers to don the appropriate PPE during future site redevelopment, excavation, and/or utility work activities in these areas.

    - Toxicity characteristic testing for lead indicate the shallow soils would not be classified as hazardous waste if they are disturbed during future property redevelopment, utility installation, or site grading activities.

- Deep soil on the eastern portion of the property contains fill material that extends to depths up to 12 feet bgs. The fill material's lead concentrations exceed DEQ Clean Fill Criteria at boring locations B17 between 5.5 and 7.5 feet bgs and B19 between 6.5 and 7 feet bgs (Figure 7). The laboratory reporting limits for selenium and naphthalene exceed DEQ Clean Fill Criteria, and it should be assumed that these metals exceed DEQ Clean Fill Criteria. The laboratory data indicate native soils below the fill have not been impacted.

- The DEQ RBC Leaching to Groundwater exposure pathway for urban residential and occupational scenarios was exceeded for lead and naphthalene. This exposure pathway can be eliminated because the depth to groundwater is approximately 100 feet bgs, and the redeveloped property will use municipal water.

4.3 Phase II ESA Soil Gas Findings

Three subsurface vapor points were installed within the footprint of the former dry cleaners and former gas station to characterize subsurface conditions (locations SG1 through SG3, Figure 6). Temporary soil vapor sampling points were installed in soil borings completed 5 feet below ground surface (bgs) using a direct-push drill rig. The three soil vapor samples were submitted for VOCs analysis by EPA Method TO-15.

Soil vapor data detected numerous VOCs above laboratory reporting limits at all three soil gas sampling locations above laboratory reporting limits. All detected VOCs were well below their respective DEQ RBCs. The detected VOCs that do not have DEQ RBCs are consistent with soil vapor data collected at former industrial / commercial sites. The 2-Propanol detections were flagged as exceeding the valid instrument calibration range and is reported as an estimate. Isopropanol (2-Propanol) was used as a tracer gas for leak detection and while the results indicated leaks at sample connections, the reported VOC detections in the samples did not indicate the presence of gross contamination. Based on these data, VOCs in soil vapor in future buildings and in outdoor air are not of environmental concern on the property.

4.4 Geotechnical Oversight Findings

Five borings (B-1 through B-5) and two asphalt cores were installed on the property for the geotechnical investigation. The borings were installed at or within 10 feet of the Phase II ESA borings. C+BEC monitored the recovered soils for field evidence of contamination and to collect characterization samples as needed. The same materials observed in the Phase II ESA were observed during the geotechnical investigation, and soil samples were not collected. Groundwater was not encountered to 41.5 feet bgs, the maximum depth drilled during geotechnical drilling activities.

5. CONTAMINANTS OF CONCERN & SUMMARY OF REGULATORY EXCEEDANCES FOR EACH DEVELOPMENT PARCEL

5.1 Contaminants of Concern

Fill materials are present to 5.5 feet bgs at the northwestern corner of the property, between 0.5 and 6.5 feet bgs in the north central portion of the property, between 8 and 12 feet bgs on the eastern portion of the property, and between 0.5 and 4 feet bgs on the southwestern- and southcentral-portions of the property. Although not identified during the geophysical survey, former property buildings' heating oil tanks or drywells may be encountered during redevelopment activities. Significant contamination, including free-phase non-aqueous phase liquid (NAPL), or free product, is not present at the property. Groundwater is present at 100 feet bgs at the property.

The Phase II ESA laboratory testing indicates constituents of concern associated with unknown fill material on the property are metals, oil-range petroleum hydrocarbons, VOCs (naphthalene only), and SVOCs. Based on the findings from the previous investigations on the property, the property's detected contaminants of concern and their maximum detected concentrations are:

Contaminant of Concern	Maximum Concentration (mg/kg)*
Petroleum Hydrocarbons	
Gasoline-Range Petroleum Hydrocarbons	ND
Diesel-Range Petroleum Hydrocarbons	ND
Oil-Range Petroleum Hydrocarbons	4,680
VOCs	
Naphthalene	0.439
All Except Naphthalene	ND
PCBs	
Aroclor 1254	0.0172
Aroclor 1260	0.0132
All except Aroclors 1254 and 1260	ND
Organochlorine Pesticides	
All	ND
SVOCs	
Acenaphthene	6.37
Acenaphthylene	5.49
Anthracene	13.7
Benzo(a)anthracene	36.8
Benzo(a)pyrene	46.8
Benzo(b)fluoranthene	43.6
Benzo(k)fluoranthene	17.5
Benzo(g,h,i)perylene	27.6
Chrysene	41.8
Dibenz(a,h)anthracene	4.88

Contaminant of Concern	Maximum Concentration (mg/kg)*
Fluoranthene	80.2
Fluorene	1.32
Indeno(1,2,3-cd)pyrene	26.3
2-Methylnaphthalene	1.43
Naphthalene	3.31
Phenanthrene	56.4
Pyrene	93.0
Carbazole	3.24
Dibenzofuran	1.96
All other SVOCs	ND
Metals	
Arsenic	25.7
Barium	738
Cadmium	3.39
Chromium	31.9
Lead	1,720
Mercury	1.38
Selenium	ND (Laboratory Reporting Limits (1.20-1.37 mg/kg) are above the Clean Fill Criteria [0.71 mg/kg])
Silver	0.511
TCLP (mg/L)	
Lead	0.994

Note: * = Unless otherwise indicated.

If former USTs are encountered during property redevelopment activities, constituents of concern associated with former USTs include petroleum hydrocarbons, VOCs, PAHs, PCBs, and metals.

The property is vacant and hazardous building materials were not identified during previous property investigation activities. If suspect hazardous building materials are encountered during property redevelopment activities, the parties listed in *Section 11, Communication* will be contacted to determine the appropriate worker health and safety procedures and material characterization activities.

The Phase II ESA report's soil analytical testing results are summarized in Appendix B, in Table 1, and results above DEQ Reference Levels are summarized in Appendix B, in Table 3. The analytical laboratory report and chain-of-custody documentation are also included in Appendix B. The Phase II ESA soil gas data (Table 2) are not discussed herein.

5.2 Summary of Regulatory Exceedances Within Future Development Parcels

The property has a Prospective Purchasers Agreement (PPA). The EPA remediation level for lead (100 mg/kg) will be used for the property instead of DEQ RBCs for lead (400

mg/kg or 800 mg/kg). Please see *Section 6, Current Regulatory Status* and *Section 7, Cleanup Standards* for details regarding the PPA.

The contaminants of concern's concentrations within each future development parcel were compared to these project reference levels: DEQ Clean Fill Criteria, RCRA Hazardous Waste Characteristic Screening Level, EPA remediation level for lead, and the DEQ RBCs for the residential, occupational, construction worker, and excavation worker soil ingestion, dermal contact, and inhalation exposure pathways. The regulatory exceedances within each future development parcel are listed below. The tables summarizing data above reference levels and figures noting the locations of these exceedances are noted for each parcel.

- **Homeownership Parcel:**
  - Shallow soils (Figure 8):
    - RBC and Clean Fill Criteria exceedances and EPA remediation level for arsenic, and the SVOC benzo(a)pyrene. Dibenz(a,h)anthracene laboratory detection limits exceed DEQ RBCs and Clean Fill Criteria across the property and may exceed this DEQ criteria.
    - EPA remediation level for lead.
  - Deep fill on the east side of the parcel (Figure 9):
    - EPA remediation level for lead.
  - See Table 1 for a summary of data above reference levels.
- **Black Business Hub Parcel:**
  - Shallow Soils (Figure 10):
    - Clean Fill Criteria exceedances for arsenic, lead, oil-range petroleum hydrocarbons, and the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
    - RBC exceedances for arsenic, oil-range petroleum hydrocarbons, and the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
    - EPA remediation level for lead.
  - Deep fill on the east side of the parcel (Figure 11):
    - EPA remediation level for lead.

- See Table 2 for a summary of data above reference levels.

- **Affordable Apartments Parcel:**
  - Shallow Soils (Figure 12):
    - Clean Fill Criteria exceedances for arsenic, oil-range petroleum hydrocarbons, and the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Dibenz(a,h)anthracene laboratory detection limits exceed DEQ RBCs and Clean Fill Criteria across the property and may exceed this DEQ criteria.

    - RBC exceedances for arsenic, oil-range petroleum hydrocarbons, and the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

    - EPA remediation level for lead.

  - See Table 3 for a summary of data above reference levels.

The site redevelopment plans will not reuse excavated soils on-site, and all disturbed soils will be disposed of at a regulated landfill. The soils are not characterized as hazardous waste.

Construction workers and excavation workers will need to follow health and safety protocols. Please see *Section 10, Health and Safety* for details.

6. CURRENT REGULATORY STATUS

The property is not listed on any regulatory databases, nor are there any engineering or institutional controls on the property. The property is finalizing a PPA for each of the redevelopment parcels as of the date of this report.

7. CLEANUP STANDARDS

Cleanup standards for the property redevelopment activities are listed by parcel below.

- **Homeownership Parcel: Shallow and Deep Soils**
  - DEQ's Residential and Construction Worker Soil Ingestion, Dermal Contact, and Inhalation Exposure Pathway RBCs.
  - EPA remediation level for lead (100 mg/kg).

- **Black Business Hub Parcel: Shallow and Deep Soils**
  - DEQ's Occupational and Construction Worker Soil Ingestion, Dermal Contact, and Inhalation Exposure Pathway RBCs in areas with occupational use, and
  - DEQ's Residential and Construction Worker Soil Ingestion, Dermal Contact, and Inhalation Exposure Pathway RBCs in publicly accessible open space.
  - EPA remediation level for lead (100 mg/kg).

- **Affordable Apartments Parcel: Shallow Soils**
  - DEQ's Residential and Construction Worker Soil Ingestion, Dermal Contact, and Inhalation Exposure Pathway RBCs.
  - EPA remediation level for lead (100 mg/kg).

If unforeseen or new fill materials and/or evidence of contamination (i.e., odor, sheen, discoloration) is encountered during redevelopment please refer to *Section 9.2* herein.

8. PROPERTY REDEVELOPMENT ACTIVITIES

The property will be developed in stages. The first stage is the grading of the entire property scheduled to begin March 2025, immediately followed by the second stage, the development of the Homeownership Parcel. The third and fourth stages are the developments of the Black Business Hub Parcel and Affordable Apartments Parcel at later dates.

Stormwater prior to grading either infiltrates into the ground or sheet flows toward the southwest per the property gradient (Appendix C, Sheet C050). Stormwater management during construction will occur per the forthcoming DEQ 1200C Stormwater Permit and its' Erosion and Sediment Control Plan (ESCP) (Appendix C, Sheets C400 through C405). The ESCP includes the placement of sediment fencing, filter fabric inserts placed in catch basins, wattle installation placed on slopes, and construction access stabilized with a wheel wash area (as required) and clean rock. The Permit application with the stormwater management plan is currently being reviewed by DEQ. Any revisions to the ESCP will be placed in this CMMP (Appendix C). The excavation and construction staff that come into contact with property soils will review and follow the forthcoming 1200C permit and provide copies of employee training logs to DEQ upon request.

The entire property will be graded and excavated in March 2025 per the temporary grading plan (Appendix C, Sheet C100). Excavation depths will occur as follows in each parcel:

- **Homeownership Parcel:**
  - West and central areas: approximately 6 feet below current grade.
  - Eastern area: approximately 13 feet below current grade.

- **Black Business Hub Parcel:**
  - Western half: approximately 7 feet below current grade.
  - Eastern half: between approximately 12 and 16 feet below current grade.

- **Affordable Apartments Parcel:**
  - Across entire parcel: between approximately 1 foot and 6 feet below current grade.

Trucks will be loaded with excavated soil along N Russell St. An estimated 22 trucks (super solos or truck & pup) between 7am and 6pm. The trucks will be completing 1.5 rounds to the Wasco County landfill and back per day. Stockpiling will be avoided; however, if stockpiling is determined to be necessary, the protocols in *Sections 9.1, Anticipated Contaminated Soil or Fill Material* and *9.2 Unanticipated Contaminated Soil or Fill Material* will be followed.

Excavated areas will be backfilled upon their completion, while excavation in other areas is being performed. The estimated timeline to complete excavation and backfill activities across the property is 10 to 12 weeks. The Black Business Hub and Affordable Apartments parcels will be backfilled with aggregate to match existing sidewalk and roadway grades upon completion of site grading and excavation activities.

9. CONTAMINATED MEDIA MANAGEMENT

The following sections provide guidance and procedures for managing contaminated soils identified on the property, as well as for the potential of encountering unanticipated and unknown soil and groundwater contamination or hazardous materials during construction activities.

The contractor will fence the entire property for the duration of the excavation and backfilling work, and all property entryways will be locked. The Contractor will also provide the necessary means and methods to detect potentially contaminated conditions, protect their worker's safety, protect the public and the environment, and properly handle (including disposal) contaminated materials. The Williams + Russell CDC's environmental consultant, or the contractor, will provide field screening for evidence of construction and demolition materials suspected of containing asbestos, and for subsurface media impacted by hazardous substances or petroleum products by visual observations, odor, discoloration and sheen test. A photoionization detector (PID) may also be used to screen soils.

9.1 Anticipated Contaminated Soil or Fill Material

Excavated soils should be managed in accordance with the following general procedures.

- Contaminated materials are required to be disposed off-site at a permitted solid-waste landfill. Contaminated materials to be disposed off-site should be direct-loaded into trucks for transport to the landfill. The trucks should be loaded in a manner that prevents the spilling, tracking, or dispersal of impacted soil. All trucks must be covered prior to exiting the Site.

- Temporary stockpiling of contaminated materials will be avoided; however, if stockpiling is determined to be necessary the materials should be placed on 8-mil or thicker plastic sheeting. The stockpile also should be securely covered to prevent dust generation and prevent rainwater infiltration and erosion. Stockpiling and erosion control construction details are in Appendix C. After removal of the stockpile, the plastic sheeting should be collected and disposed off-site with the contaminated materials.

- The off-site disposal facility must be a DEQ-permitted, Subtitle D, solid-waste landfill. Prior approval from the disposal facility and from DEQ may be necessary. The excavated soils will be transported to Wasco County Landfill for disposal.

- Prior to the transport of contaminated materials for off-site disposal, a permit must be procured from the disposal facility. If acceptable to the disposal facility, existing site characterization data (i.e., the previous environmental investigations' data) may be used to provide waste profiling information. Once obtained, the disposal permit must accompany each shipment of materials to the landfill.

9.2 Unanticipated Contaminated Soil or Fill Material

Unanticipated contaminated soil may be present based on historical land use of the property and the documented fill material across the property (fill depths of 5 feet bgs across the property and between 8 and 12 feet on the eastern portion of the property). Unanticipated contaminated soil is soil that exhibits unusual soil staining, color variations, unusual odors, building debris (i.e., bricks, treated timber or charcoal), or oily liquids. Petroleum hydrocarbons odor may coincide with elevated constituent concentrations of gasoline or diesel fuel. In addition, unanticipated contaminated soil is considered present if it exhibits a VOC vapor concentration in excess of 50 parts per million (ppm), as measured with a PID using soil sample head space. Unanticipated

contaminated soil should be managed in accordance with the following general procedures.

- Upon discovery of suspected unanticipated and unknown contaminated soil, immediately suspend all activities in the vicinity and notify Williams + Russell CDC's environmental consultant. The consultant will determine whether DEQ notification is necessary.
- Temporarily stockpile contaminated materials on 8-mil or thicker plastic sheeting, pending characterization testing and laboratory analyses for contaminants of concern determined by the contractor, Williams + Russell CDC's environmental consultant, and/or as required by the disposal facility (and DEQ if DEQ is notified). The stockpile also should be securely covered to prevent dust generation and prevent rainwater infiltration and erosion. After removal of the stockpile, the plastic sheeting should be collected and disposed off-site with the contaminated materials.
- Pending the field observations and characterization data, the soils may be able to be reused on site as clean fill, only as approved by Williams + Russell CDC's environmental consultant and/or Williams + Russell CDC. Soils unable to be reused must be disposed off-site at a regulated disposal facility.
- The off-site disposal facility must be a DEQ-permitted, Subtitle D, solid-waste landfill. Prior approval from the disposal facility and from DEQ may be necessary. If the waste is determined to be hazardous, Williams + Russell CDC and/or their consultant will assist with the hazardous waste disposal characterization, regulatory agency notification, regulatory permitting and reporting, and locating a transportation company and disposal facility.
- Prior to the transport of contaminated materials for off-site disposal, a permit must be procured from the disposal facility. Results of stockpiled soil characterization samples should be used for waste profiling information. Once obtained, the disposal permit must accompany each shipment of materials to the landfill.
- Confirmatory soil / fill material sampling activities will be completed per a PPA Sampling and Analysis Plan after the removal of the contaminated fill material and/or soil.

9.3 Unanticipated Contaminated Groundwater

Due to the depth of the local groundwater table (greater than 75 feet bgs), groundwater is not anticipated to be encountered during construction activities. However, the potential exists of encountering perched groundwater that may have come into contact with

contaminated soil and/or fill material. If odors or sheen (or free product) is present on the water surface, unanticipated contaminated groundwater should be managed in accordance with the following general procedures.

- Upon discovery of suspected unanticipated and unknown contaminated groundwater, immediately suspend all activities in the vicinity and notify DEQ.
- If free product is encountered in soil, then DEQ will be notified, and the free product will be characterized to determine the next steps.
- If free-phase petroleum product is encountered in groundwater, the free product should be removed for disposal in accordance with local, state, and federal regulations. To remove free product from the surface of the groundwater, the construction contractor may choose to use a vacuum truck to skim the product from the surface of the groundwater (if sufficient product is present). The removed product should be vacuumed directly into the vacuum truck or into drums. Alternatively, the construction contractor may choose to use adsorbent booms/pads to remove the product/sheen; however, adsorbent booms/pads are not encouraged because of the elevated health and safety risks of handling the used booms and the higher costs associated with disposal of used booms/pads.
- Impacted groundwater should be containerized in a temporary aboveground storage tank for characterization testing to determine appropriate management requirements. Depending upon the analysis results, the disposal options may include the following:
    - Disposal on the ground or into the local storm-water system may be done with prior approval from DEQ as long as concentrations are below, or treated to levels below, DEQ RBCs;
    - Discharge to the stormwater or sanitary sewer which will require the groundwater be treated through a City of Portland Bureau of Environmental Services (BES) and/or DEQ-approved treatment system and a discharge permit from the municipal stormwater discharge or wastewater treatment facility; or
    - Treatment and disposal at an off-site oil recycling facility. Impacted water that is transported to an off-site treatment or recycling facility should be placed into a Department of Transportation (DOT) approved tanker or vacuum truck.

10. HEALTH AND SAFETY

Based on the available environmental soil/ fill material data, contractors completing the property excavation activities and any work in soils (e.g., trenches) require lead safety training, with an option to include 40-hour or 8-Hour HAZWOPER training. The contracting company(ies) may have their own safety and/or training requirements for working on sites with unknown fill, and they may have their own health and safety plan(s). If so, C+BEC recommends the health and safety plan(s) be kept on file with this CMMP and/or appended to this CMMP.

11. COMMUNICATION

C+BEC recommends the construction site superintendent be notified immediately if evidence of contamination (i.e., odor, sheen, discoloration) is encountered and/or if new types of fill materials are encountered during site redevelopment activities.

C+BEC recommends the site superintendent notify Williams + Russell CDC and Williams + Russell CDC's environmental consultant in the event contamination or new types of fill materials are encountered so they can be properly characterized for worker safety and disposal purposes (see *Section 9.2*).

C+BEC also recommends the contact information for parties to be notified of contaminated and/or unknown fill material or other media be listed below.

Excavation Company representative's contact information:

Blake Turin
N8 Excavation
503-867-4456 (mobile)
503-663-5472 (office)
blake.turin@n8excavation.com

Construction Company representatives' contact information:

Nate Reff
Colas Construction, Construction Manager
971-317-6173 (mobile)
503-292-4025 (office)
nate@colasconstruction.com

Colas Construction, Construction Superintendent
_____ (mobile)
503-292-4025 (office)
Email:_____

Building foundation installation representative's contact information:

_____
_____
_____
_____

Owner's contact information:

Azalea Renfield, MPA, MPP, MS-HRM
Williams & Russell CDC
Executive Director
503-482-8352
azalea@williamsrussellcdc.org

Environmental consultant's contact info:

Jill Betts, R.G. with Coles & Betts Environmental Consulting, LLC
503-819-2835 (mobile)
503-477-6150 (office)
jill@colesandbetts.com

Disposal Facility contact info:

Wasco County Landfill
2550 Steele Road
The Dalles, Oregon 97058
541-296-4082

Other_____:

_____
_____
_____
_____

12. RECORD KEEPING

The person(s) performing the work, typically the Contractor, will be required to provide documentation to Williams + Russell CDC describing all activities related to the excavation, on-site management, transportation, and disposal of contaminated materials generated during redevelopment of the property. At a minimum, the Contractor must provide the following information at the completion of the project to the property owner (or its representative), and as necessary (i.e., if find unanticipated contaminated soil and/or fill or if groundwater is encountered) to the environmental consultant:

- Description of the excavation, including a diagram showing its location, approximate dimensions, and depth.
- If unanticipated contaminated media is left in-place in the ROW, the characterization data and locations and depths of the contamination should be provided to the City of Portland, and the CMMP subsequent to construction activities should be kept on file at Williams + Russell CDC.
- Amount of contaminated materials (soil and/or water) transported off-site for disposal,
    - For soil, include weight tickets from the disposal facility to which the material was transported and a copy of the landfill permit.
    - For water, include receipts from off-site treatment or recycling facilities utilized for water disposal, or any discharge permits.
- Amount of asphalt materials transported off-site for recycling, and documentation such as a receipt or weight ticket.
- Copy of analysis data from the analytical laboratory that was used for unanticipated contaminated soil, fill, or groundwater waste profiling.

13. ADDITIONAL CONSTRUCTION CONSIDERATIONS

If a UST is encountered during redevelopment activities, the tank should be decommissioned per DEQ regulations, including decommissioning by a DEQ-licensed UST Service Provider and assessed for releases. DEQ staff associated with the PPA should be notified of the tank and whether a release has occurred, including any remediation activities.

If a drywell or privy pit is encountered during redevelopment activities it should be decommissioned per DEQ Underground Injection Control (UIC) regulations.

Soil/sediment sampling and DEQ UIC Program notification of the UIC closure will be required. The DEQ PPA staff will require notification and whether a release has occurred, including any remediation activities.

14. GLOSSARY OF ABBREVIATIONS

bgs	below ground surface
C+BEC	Coles and Betts Environmental Consulting, LLC
CMMP	Contaminated Media Management Plan
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
mg/kg	milligrams per kilogram
mg/L	milligram per liter
NAPL	non-aqueous phase liquid
PCB	polychlorinated biphenyls
PID	photoionization detector
PPA	Prospective Purchasers Agreement
ppm	parts per million
RBC	risk-based concentration
RCRA	resource conservation and recovery act
SVOC	semi-volatile organic compounds
TCLP	toxicity characteristic leaching procedure
UIC	underground injection control
VOC	volatile organic compounds

15. REFERENCES

Clean Fill Determinations, by DEQ, dated February 21, 2019.

Geotechnical Engineering Report, Williams and Russell Project, Portland, Oregon, by Columbia West Engineering, Inc., dated August 25, 2023.

Phase I Environmental Site Assessment Report, Williams & Russell Block, Northwest of the Intersection of N. Williams Avenue & N. Russell Street, Tax Lot 1N1E27AC 4100 and Portion of Tax Lot 1N1E27AC 1800, Portland, Oregon 97227, by C+BEC, dated July 28, 2023.

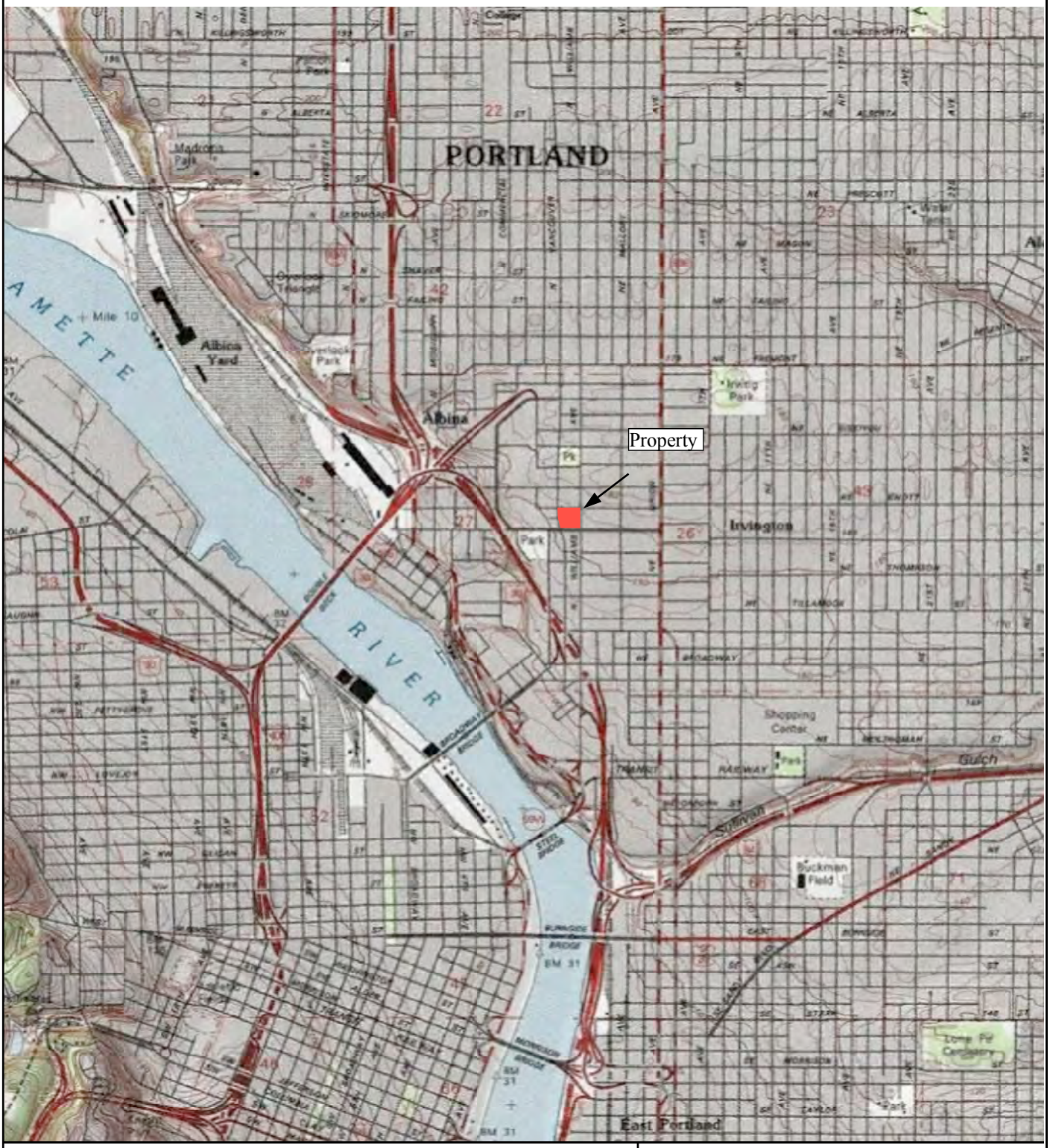
Included in the 2023 Phase I ESA:

Phase II Environmental Site Assessment Report, Williams & Russell Development, City Block Northwest of the Intersection of N Williams Avenue and N Russell Street, Portland, Oregon 97227, by C+BEC, dated July 23, 2020.

Phase II Environmental Site Assessment Report, Williams & Russell Development, City Block Northwest of the Intersection of N Williams Avenue and N Russell Street, Portland, Oregon 97227, by C+BEC, dated February 19, 2021.

Risk-Based Concentrations for Individual Chemicals Table, by Oregon Department of Environmental Quality, dated August 2023.

Note: Earth Point Topographical Map from Google Earth Pro.



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Approx. Scale: 1' = 27,700'	Approved By	Date/Revision
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Figure 1. Topographic map showing the location of the Property.

Map created in collaboration with Reynolds Engineering, LLC.

LEGEND:

Property Boundary

Map created with Reynolds Engineering.
Aerial photo, dated July, 2018, is from Google Earth Pro.

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		11/27/2024 Rev. 0

Figure 2. Property map.

Figure 3.
Site Plans Showing the Three Development Parcels on the Property

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		11/27/2024
		Rev. 0

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Note: Diagram based on Lever Architecture Site Plan (2024)

Map created with Reynolds Engineering.
Aerial photo, dated July, 2018, is from Google Earth Pro.

LEGEND:

Property Boundary

Historical Building Footprint and Type and Year of Operation

Steam Heater B. (1909)

Note: USTs associated with heating and/or historical commercial operations may be located across the Property

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Approx. Scale: 1' = 55'	Approved By	Date/Revision
		11/27/2024 Rev. 0

Figure 4. Items of Historical Environmental Concern on the Property.

Map created with Reynolds Engineering.
Aerial photo, dated July, 2018, is from Google Earth Pro.

Key for Geophysical Anomalies

Piping
GPR Anomaly
Flat Reflector
Disturbed Soil Zone

LEGEND:

Property Boundary

Historical Building Footprint and Type and Year of Operation

Steam Heater B. (1909)

Note: USTs associated with heating and/or historical commercial operations may be located across the Property

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Approx. Scale: 1' = 55'	Approved By	Date/Revision
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Figure 5. Geophysical Survey Findings with Items of Historical Environmental Concern on the Property.

Key for Phase II ESA Sampling Locations

B20 15 ft — Temporary Boring Number and Depth

SG1 — Soil Gas Sampling Point

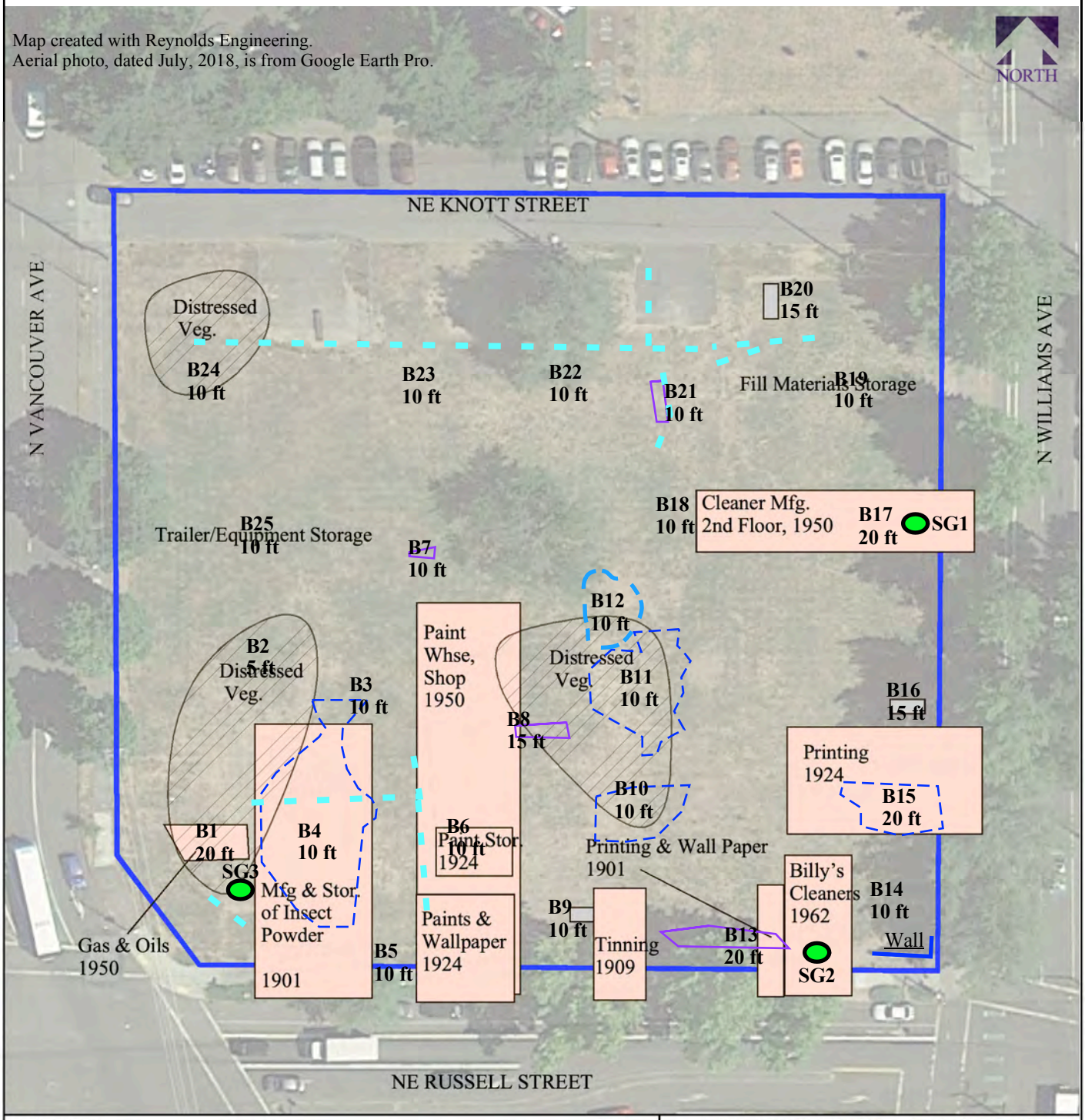
Key for Geophysical Anomalies

Piping

GPR Anomaly

Flat Reflector

Disturbed Soil Zone



LEGEND:

Property Boundary

Historical Building Footprint and Type and Year of Operation

Steam Heater B. (1909)

Note: USTs associated with heating and/or historical commercial operations may be located across the Property

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Approx. Scale: 1" = 55'	Approved By	Date/Revision
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Figure 6. Location of Phase II ESA Soil and Soil Gas Borings on the Property.

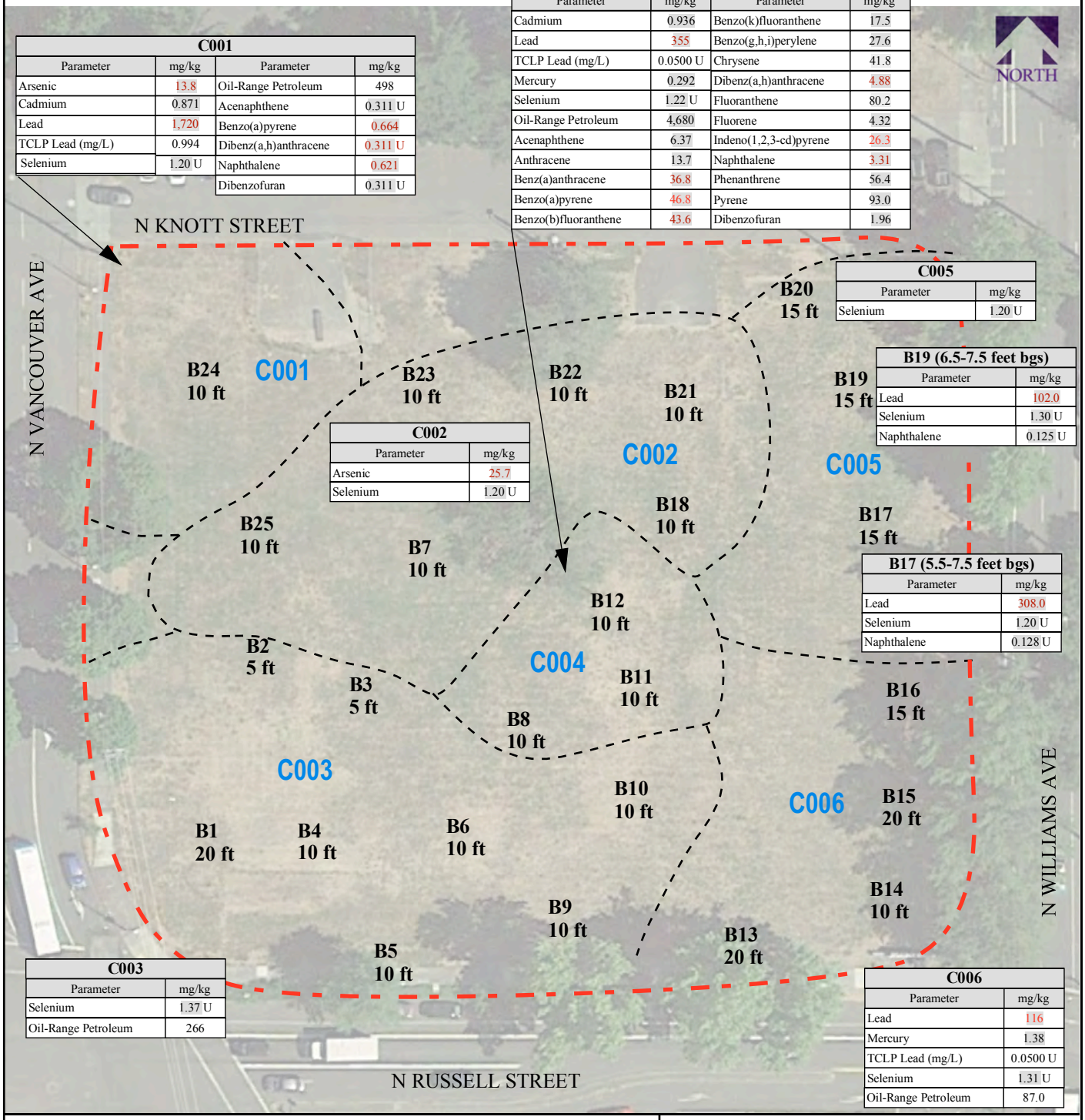
B20
15 ft = Temporary Boring Number and Depth

C001 = Composite sample group

RED = Concentration exceeds DEQ Risk-Based Criteria

0.25 = Concentration exceeds DEQ Clean Fill Criteria

Estimated Area of Contaminated Shallow Soil



C001

Parameter	mg/kg	Parameter	mg/kg
Arsenic	13.8	Oil-Range Petroleum	498
Cadmium	0.871	Acenaphthene	0.311 U
Lead	1,720	Benzo(a)pyrene	0.664
TCLP Lead (mg/L)	0.994	Dibenz(a,h)anthracene	0.311 U
Selenium	1.20 U	Naphthalene	0.621
		Dibenzofuran	0.311 U

C004

Parameter	mg/kg	Parameter	mg/kg
Cadmium	0.936	Benzo(k)fluoranthene	17.5
Lead	355	Benzo(g,h,i)perylene	27.6
TCLP Lead (mg/L)	0.0500 U	Chrysene	41.8
Mercury	0.292	Dibenz(a,h)anthracene	4.88
Selenium	1.22 U	Fluoranthene	80.2
Oil-Range Petroleum	4,680	Fluorene	4.32
Acenaphthene	6.37	Indeno(1,2,3-cd)pyrene	26.3
Anthracene	13.7	Naphthalene	3.31
Benz(a)anthracene	36.8	Phenanthrene	56.4
Benzo(a)pyrene	46.8	Pyrene	93.0
Benzo(b)fluoranthene	43.6	Dibenzofuran	1.96

C005

Parameter	mg/kg
Selenium	1.20 U

B19 (6.5-7.5 feet bgs)

Parameter	mg/kg
Lead	102.0
Selenium	1.30 U
Naphthalene	0.125 U

C002

Parameter	mg/kg
Arsenic	25.7
Selenium	1.20 U

B17 (5.5-7.5 feet bgs)

Parameter	mg/kg
Lead	308.0
Selenium	1.20 U
Naphthalene	0.128 U

C003

Parameter	mg/kg
Selenium	1.37 U
Oil-Range Petroleum	266

C006

Parameter	mg/kg
Lead	116
Mercury	1.38
TCLP Lead (mg/L)	0.0500 U
Selenium	1.31 U
Oil-Range Petroleum	87.0

NOTES:
Composite soil sample depths are from 0.5 to 3.5 feet bgs.
Map created with Reynolds Engineering.
Aerial photo, dated July, 2018, is from Google Earth Pro.
"U" = Not detected above the laboratory reporting limit indicated.
Detected oil-range petroleum hydrocarbons below DEQ RBCs and Clean Fill Criteria are shown to indicate areas where they are present and to plan for their excavation and disposal.

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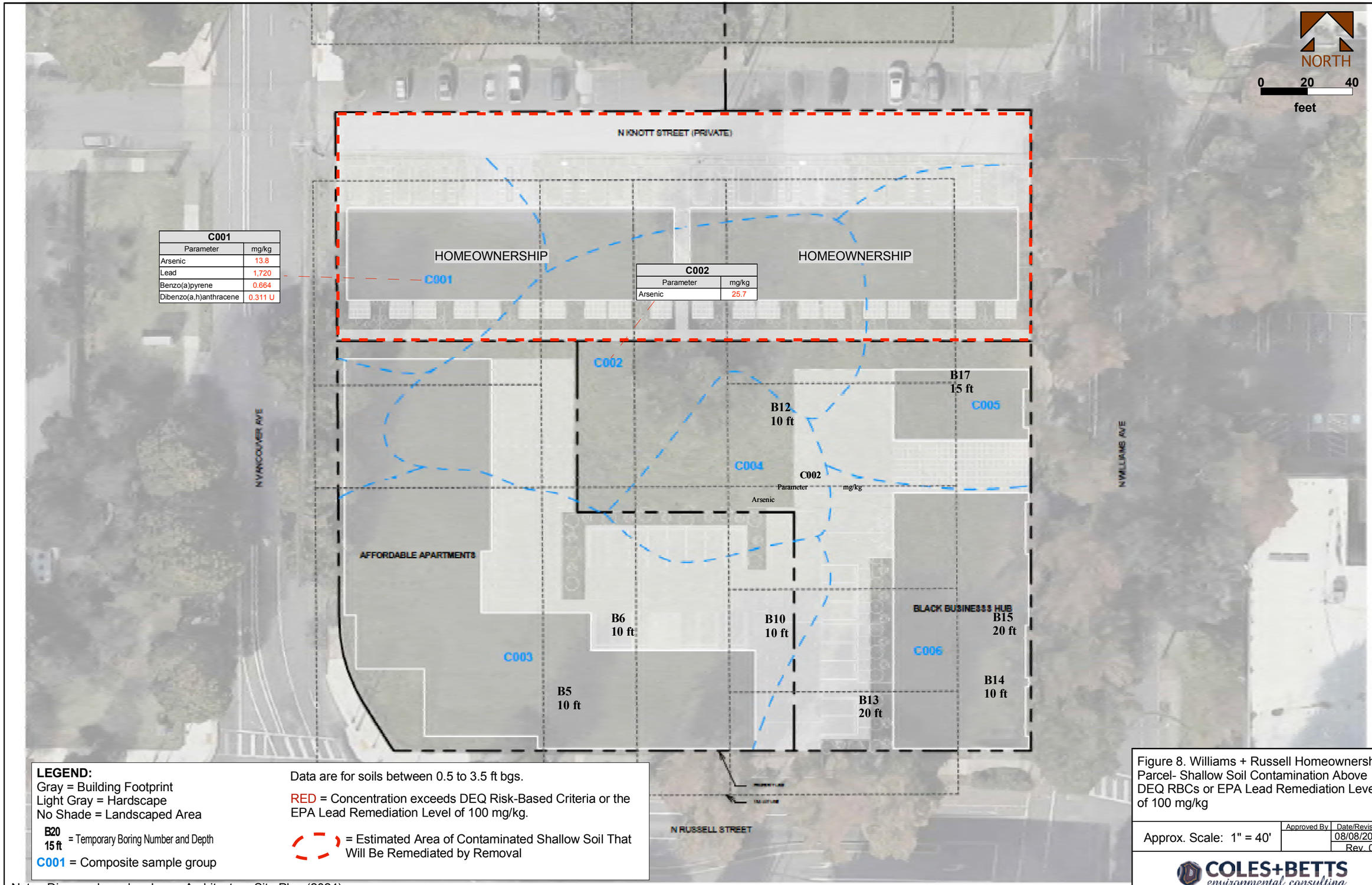
Approx. Scale: 1' = 55'	Approved By	Date/Revision
		7/29/2024 Rev 0

Figure 7. Deep Soil and Composite Shallow Soil Results That Exceed DEQ Clean Fill Criteria, DEQ RBCs, and EPA Remediation Level for Lead.



C001	
Parameter	mg/kg
Arsenic	13.8
Lead	1,720
Benzo(a)pyrene	0.664
Dibenzo(a,h)anthracene	0.311 U

C002	
Parameter	mg/kg
Arsenic	25.7

LEGEND:
Gray = Building Footprint
Light Gray = Hardscape
No Shade = Landscaped Area

B20 / 15 ft = Temporary Boring Number and Depth

C001 = Composite sample group

Data are for soils between 0.5 to 3.5 ft bgs.

RED = Concentration exceeds DEQ Risk-Based Criteria or the EPA Lead Remediation Level of 100 mg/kg.

= Estimated Area of Contaminated Shallow Soil That Will Be Remediated by Removal

Note: Diagram based on Lever Architecture Site Plan (2024)

Figure 8. Williams + Russell Homeownership Parcel- Shallow Soil Contamination Above DEQ RBCs or EPA Lead Remediation Level of 100 mg/kg

Approx. Scale: 1" = 40'	Approved By	Date/Revision
		08/08/2024
		Rev. 0

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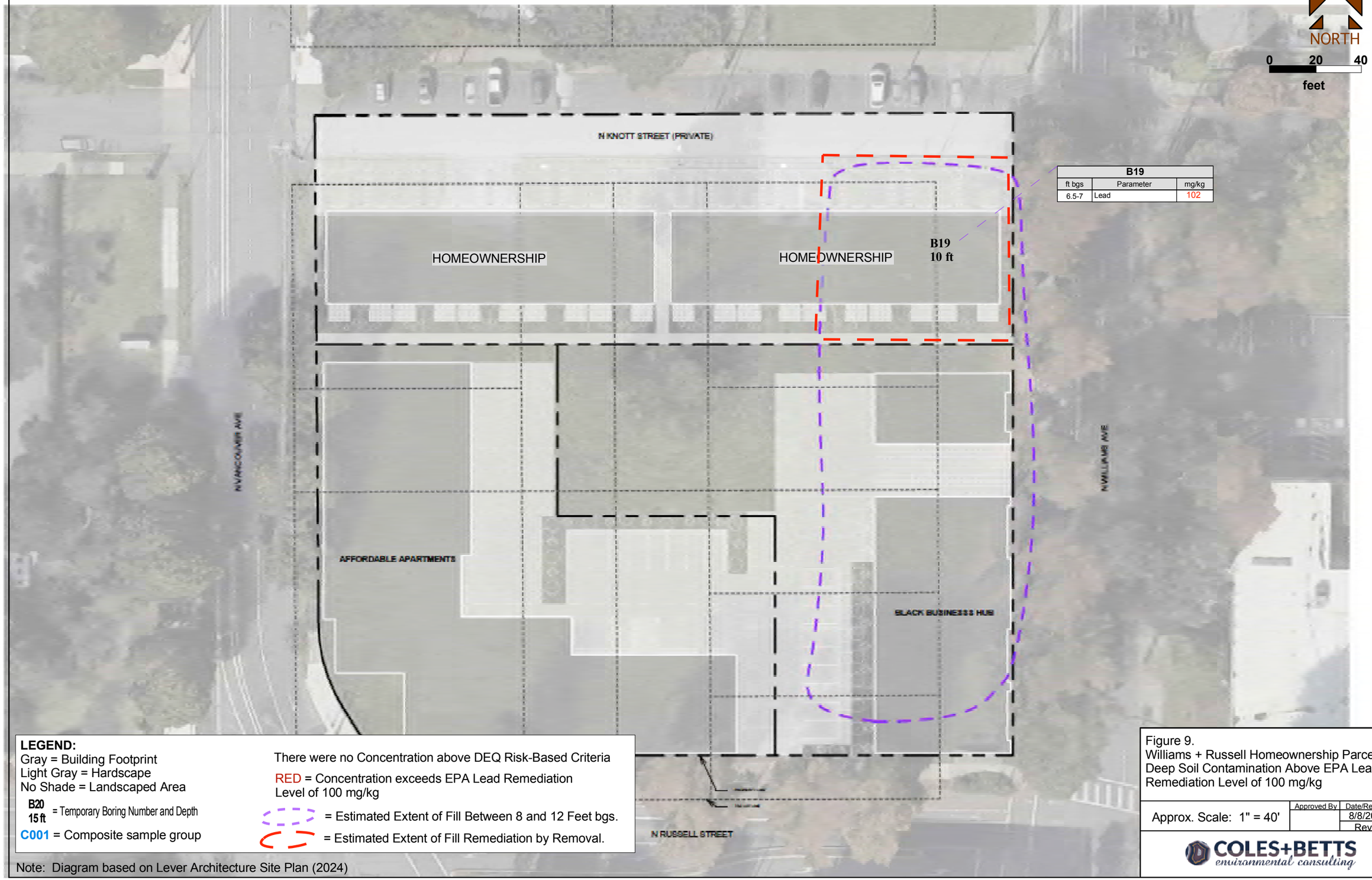

LEGEND:
Gray = Building Footprint
Light Gray = Hardscape
No Shade = Landscaped Area

B20 / 15 ft = Temporary Boring Number and Depth

C001 = Composite sample group

There were no Concentration above DEQ Risk-Based Criteria

RED = Concentration exceeds EPA Lead Remediation Level of 100 mg/kg

= Estimated Extent of Fill Between 8 and 12 Feet bgs.

= Estimated Extent of Fill Remediation by Removal.

Note: Diagram based on Lever Architecture Site Plan (2024)

Figure 9.
Williams + Russell Homeownership Parcel - Deep Soil Contamination Above EPA Lead Remediation Level of 100 mg/kg

Approx. Scale: 1" = 40'	Approved By	Date/Revision
		8/8/2024
		Rev. 0

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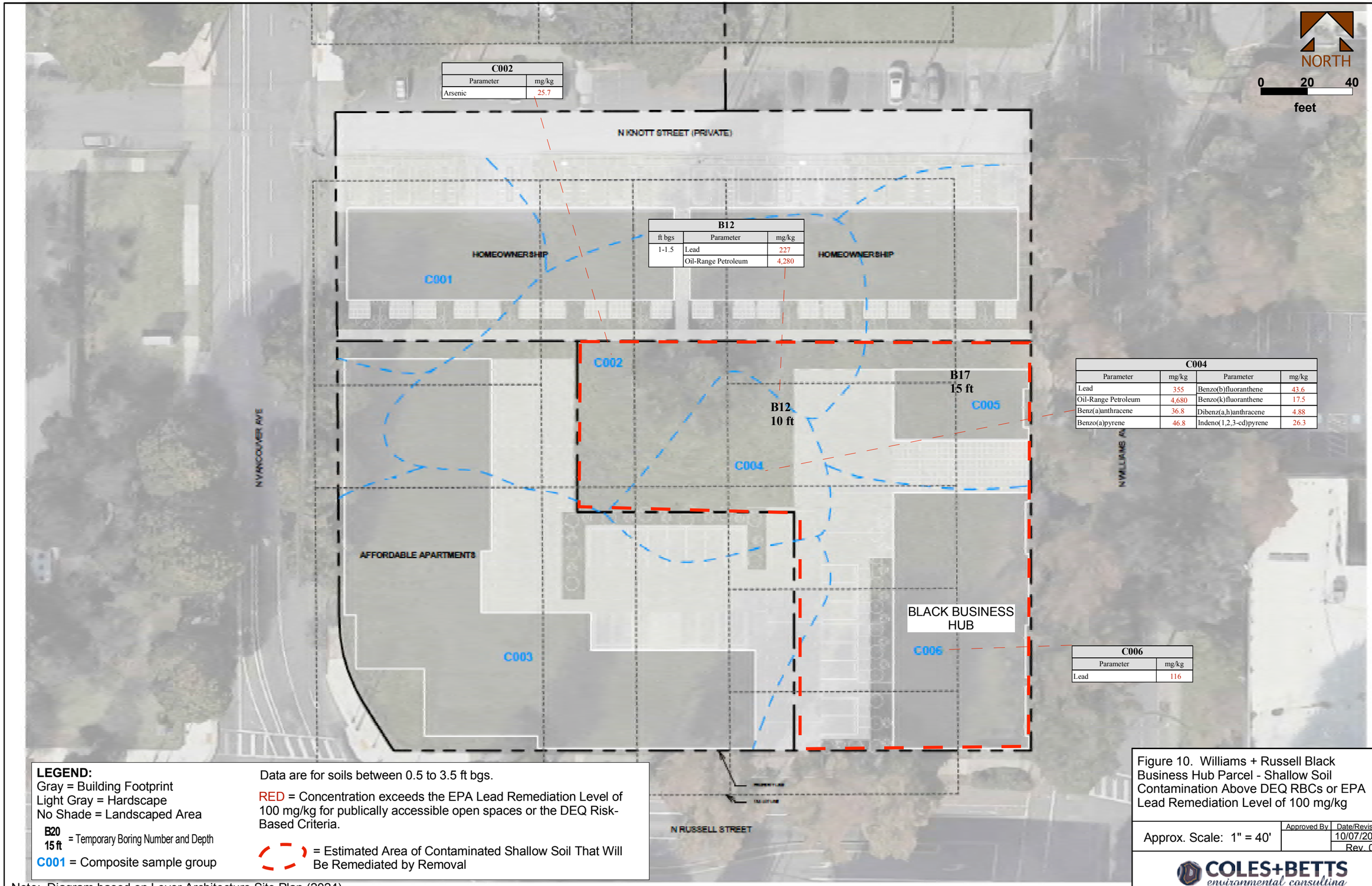


C002	
Parameter	mg/kg
Arsenic	25.7

B12		
ft bgs	Parameter	mg/kg
1-1.5	Lead	227
	Oil-Range Petroleum	4,280

C004			
Parameter	mg/kg	Parameter	mg/kg
Lead	355	Benzo(b)fluoranthene	43.6
Oil-Range Petroleum	4,680	Benzo(k)fluoranthene	17.5
Benz(a)anthracene	36.8	Dibenz(a,h)anthracene	4.88
Benzo(a)pyrene	46.8	Indeno(1,2,3-cd)pyrene	26.3

C006	
Parameter	mg/kg
Lead	116

LEGEND:
Gray = Building Footprint
Light Gray = Hardscape
No Shade = Landscaped Area

B20 / 15 ft = Temporary Boring Number and Depth

C001 = Composite sample group

Data are for soils between 0.5 to 3.5 ft bgs.

RED = Concentration exceeds the EPA Lead Remediation Level of 100 mg/kg for publically accessible open spaces or the DEQ Risk-Based Criteria.

= Estimated Area of Contaminated Shallow Soil That Will Be Remediated by Removal

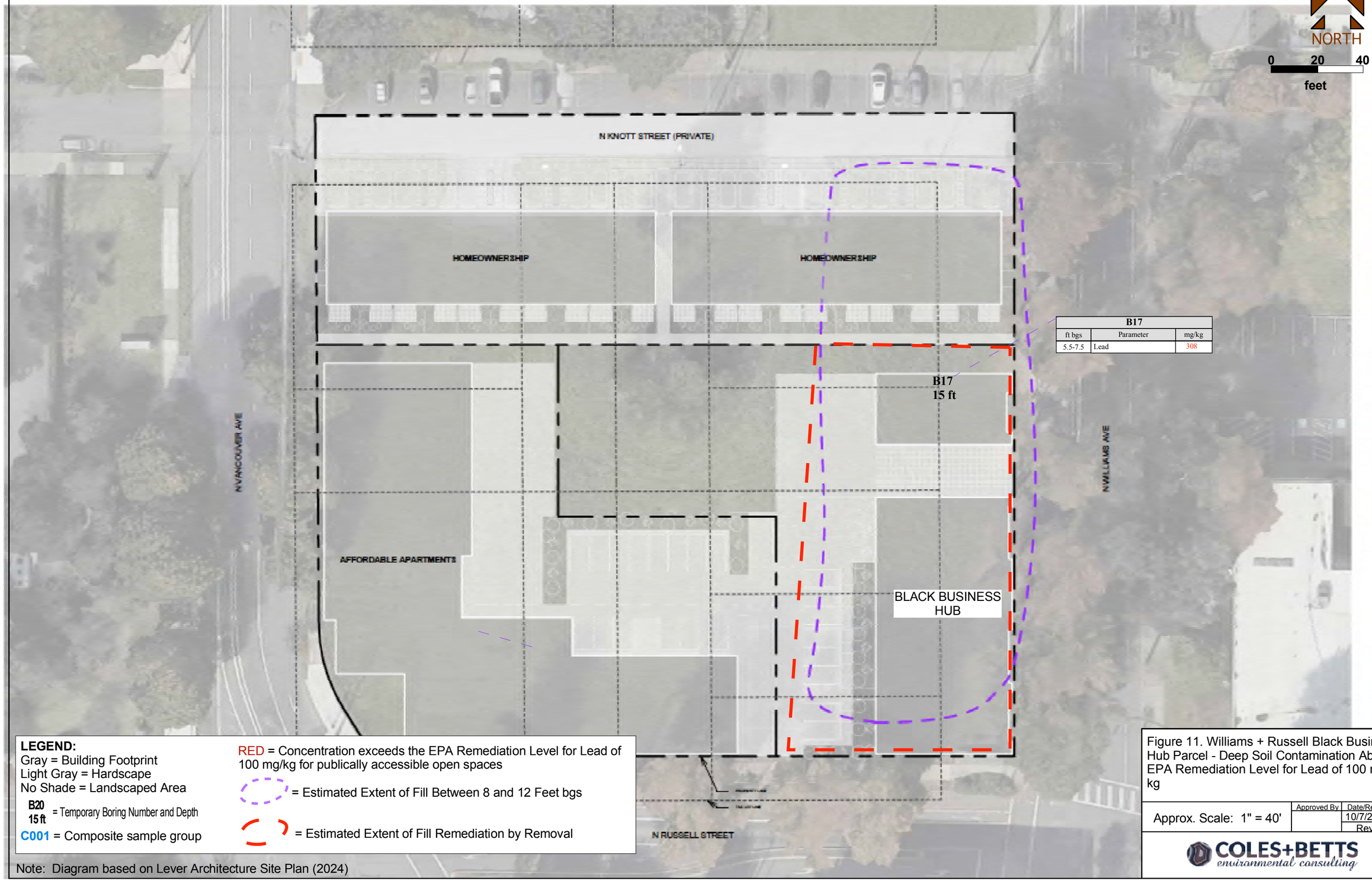
Note: Diagram based on Lever Architecture Site Plan (2024)

Figure 10. Williams + Russell Black Business Hub Parcel - Shallow Soil Contamination Above DEQ RBCs or EPA Lead Remediation Level of 100 mg/kg

Approx. Scale: 1" = 40'

Approved By	Date/Revision
	10/07/2024 Rev. 0

COLES+BETTS environmental consulting



LEGEND:
Gray = Building Footprint
Light Gray = Hardscape
No Shade = Landscaped Area

B20 / 15 ft = Temporary Boring Number and Depth

C001 = Composite sample group

RED = Concentration exceeds the EPA Remediation Level for Lead of 100 mg/kg for publically accessible open spaces

= Estimated Extent of Fill Between 8 and 12 Feet bgs

= Estimated Extent of Fill Remediation by Removal

Note: Diagram based on Lever Architecture Site Plan (2024)

Figure 11. Williams + Russell Black Business Hub Parcel - Deep Soil Contamination Above EPA Remediation Level for Lead of 100 mg/kg

Approx. Scale: 1" = 40'	Approved By	Date/Revision
		10/7/2024
		Rev. 0

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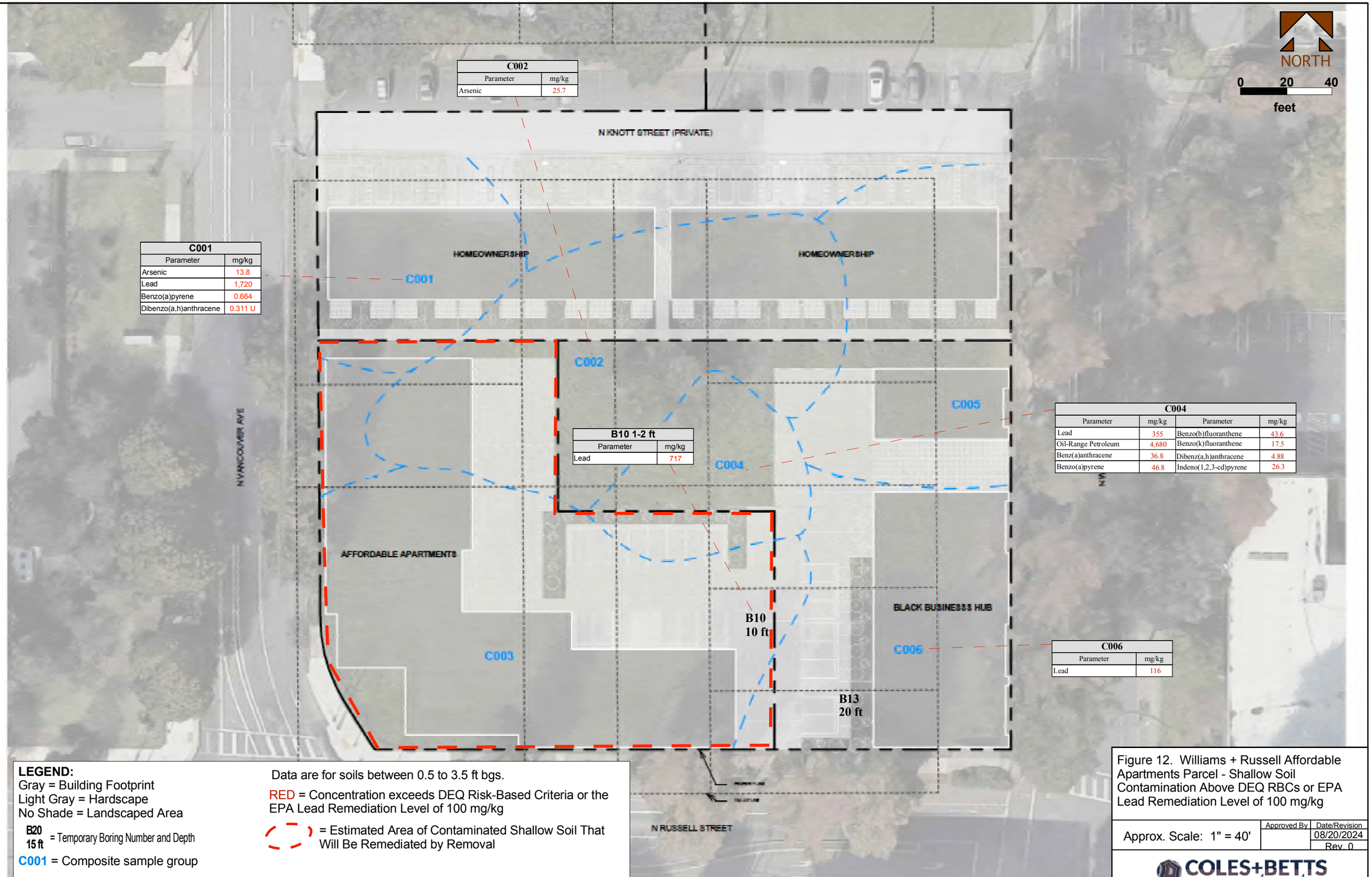

C002	
Parameter	mg/kg
Arsenic	25.7

C001	
Parameter	mg/kg
Arsenic	13.8
Lead	1,720
Benzo(a)pyrene	0.664
Dibenzo(a,h)anthracene	0.311 U

B10 1-2 ft	
Parameter	mg/kg
Lead	717

C004			
Parameter	mg/kg	Parameter	mg/kg
Lead	355	Benzo(b)fluoranthene	43.6
Oil-Range Petroleum	4,680	Benzo(k)fluoranthene	17.5
Benz(a)anthracene	36.8	Dibenz(a,h)anthracene	4.88
Benzo(a)pyrene	46.8	Indeno(1,2,3-cd)pyrene	26.3

C006	
Parameter	mg/kg
Lead	116

LEGEND:
Gray = Building Footprint
Light Gray = Hardscape
No Shade = Landscaped Area

B20 / 15 ft = Temporary Boring Number and Depth

C001 = Composite sample group

Data are for soils between 0.5 to 3.5 ft bgs.

RED = Concentration exceeds DEQ Risk-Based Criteria or the EPA Lead Remediation Level of 100 mg/kg

= Estimated Area of Contaminated Shallow Soil That Will Be Remediated by Removal

Note: Diagram based on Lever Architecture Site Plan (2024)

Figure 12. Williams + Russell Affordable Apartments Parcel - Shallow Soil Contamination Above DEQ RBCs or EPA Lead Remediation Level of 100 mg/kg

Approx. Scale: 1" = 40'

Approved By	Date/Revision
	08/20/2024
	Rev. 0

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Table 1. Summary of Soil Analytical Data Above DEQ or EPA Reference Levels for the Homeownership Parcel

	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	EPA Remediation Level for Lead[4]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[5]	12/8/20 B19 6.5-7		12/8/20 C001		12/8/20 C002	
Total Metals EPA 6020														
Arsenic	mg/kg	8.8	0.43	1.9	15	420	-	-	**7.83**		**13.8**		**25.7**	
Lead	mg/kg	28	400**	800**	800**	800**	100	-	***102***		***1,720***		**98.8**	
Semivolatile Organic Compounds by EPA 8270E														
Benzo(a)pyrene	mg/kg	0.11	0.11	2.1	17	490	-	-	-		**0.664**		-	
Dibenz(a,h)anthracene	mg/kg	0.11	0.11	2.1	17	490	-	-	-		**0.311**	U	-	

NOTES:
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
U = not detected above method detection limit shown
ND = not detected
Bold denotes concentration above laboratory method reporting limit.
Color denotes detected concentration exceeds DEQ RBC screening criteria.
Gray Shading denotes detected concentration exceeds DEQ Clean Fill Criteria.
Italics and underline denotes detected concentration exceeds EPA Lead Screening Criteria
** denotes the DEQ RBC for Lead will not be used as the remediation goal. The EPA remediation goal of 100 mg/kg will be used instead.
1 = Oregon Department of Environmental Quality, Clean Fill Determinations, Dated February 21, 2019.
2 = Oregon Department of Environmental Quality, Table 1: Regional Default Background Concentrations for Metals in Soil, revised March 20, 2013.
3 = Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised May 2018.
4 = EPA Updated Soil Lead Guidance for Cercla Sites and RCRA Corrective Action Facilities, January 2024. Screening Level of 100 mg/kg selected due to the property's remedial action for residential use.
5 = EPA Maximum Concentration of Contaminants for the Toxicity Characteristic (Table 1).
The leaching to groundwater exposure pathway was removed based on the depth to groundwater at the property (greater than 65 feet).
The volatilization to outdoor air and vapor intrusion into buildings exposure pathways were removed from this table since there were no exceedances.
The remediation level for arsenic is the DEQ Clean Fill Criteria value of 8.8 mg/kg.
Samples analyzed by Apex Laboratories of Tigard, Oregon.

Table 2. Summary of Soil Analytical Data Above DEQ Reference Levels or EPA Reference Levels for the Black Business Hub Parcel

	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	EPA Remediation Level for Lead[4]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[5]	12/7/20 B12 1-1.5		12/8/20 B17 5.5-7.5		12/8/20 C002		12/7/20 C004		12/7/20 C006	
Total Metals EPA 6020																		
Arsenic	mg/kg	8.8	0.43	**1.9**	**15**	420	-	-	**3.97**		**7.56**		**25.7**		**6.05**		**7.30**	
Lead	mg/kg	28	400**	800	800	800	100	-	***227***		***308***		**98.8**		***355***		***116***	
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																		
Oil-Range	mg/kg	2,800	2,800	36,000	11,000	-	-	-	**4,240**	F-03	50	U	50	U	**4,680**	F-03	**87.0**	F-03
Semivolatile Organic Compounds by EPA 8270E																		
Benzo(a)anthracene	mg/kg	0.73	1.1	21	170	4,800	-	-							**36.8**			
Benzo(a)pyrene	mg/kg	0.11	0.11	2.1	17	490	-	-							**46.8**			
Benzo(b)fluoranthene	mg/kg	1.1	1.1	21	170	4,900	-	-							**43.6**			
Benzo(k)fluoranthene	mg/kg	11	11	210	1,700	49,000	-	-							**17.5**	M-05		
Dibenz(a,h)anthracene	mg/kg	0.11	0.11	2.1	17	490	-	-							**4.88**			
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	1.1	21	170	4,900	-	-							**26.3**			

NOTES:
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
U = not detected above method detection limit shown
ND = not detected
Bold denotes concentration above laboratory method reporting limit.
Color denotes detected concentration exceeds DEQ RBC screening criteria.
Gray Shading denotes detected concentration exceeds DEQ Clean Fill Criteria.
Italics and underline denotes detected concentration exceeds EPA Lead Screening Criteria.
** denotes the DEQ Residential RBC for Lead will not be used as the remediation goal in publicly accessible open space. The EPA remediation goal of 100 mg/kg will be used instead.
1 = Oregon Department of Environmental Quality, Clean Fill Determinations, Dated February 21, 2019.
2 = Oregon Department of Environmental Quality, Table 1: Regional Default Background Concentrations for Metals in Soil, revised March 20, 2013.
3 = Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised May 2018.
4 = EPA Updated Soil Lead Guidance for Cercla Sites and RCRA Corrective Action Facilities, January 2024. Screening Level of 100 mg/kg selected due to the property's remedial action for residential use.
5 = EPA Maximum Concentration of Contaminants for the Toxicity Characteristic (Table 1).
The leaching to groundwater exposure pathway was removed based on the depth to groundwater at the property (greater than 65 feet).
The volatilization to outdoor air and vapor intrusion into buildings exposure pathways were removed from this table since there were no exceedances.
The remediation level for arsenic is the DEQ Clean Fill Criteria value of 8.8 mg/kg.
Samples analyzed by Apex Laboratories of Tigard, Oregon.
F-03 = The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
M-05 = Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.

Table 3. Summary of Soil Analytical Data Above DEQ or EPA Reference Levels for the Affordable Apartments Parcel

	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	EPA Remediation Level for Lead[4]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[5]	12/7/20 B10 1-2		12/8/20 C001		12/8/20 C002		12/7/20 C004		12/7/20 C006	
Total Metals EPA 6020																		
Arsenic	mg/kg	8.8	**0.43**	**1.9**	**15**	420	-	-	**4.63**		**13.8**		**25.7**		**6.05**		**7.30**	
Lead	mg/kg	28	400**	800**	800**	800**	*100*		***717***		***1,720***		**98.8**		***355***		***116***	
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																		
Oil-Range	mg/kg	2,800	2,800	36,000	11,000	-	-	-	-		-		50	U	**4,680**	F-03	**87.0**	F-03
Semivolatile Organic Compounds by EPA 8270E																		
Benzo(a)anthracene	mg/kg	0.73	**1.1**	**21**	170	4,800	-	-	-		-		-		**36.8**		-	
Benzo(a)pyrene	mg/kg	0.11	**0.11**	**2.1**	**17**	490	-	-	-		**0.664**		-		**46.8**		-	
Benzo(b)fluoranthene	mg/kg	1.1	**1.1**	**21**	170	4,900	-	-	-		-		-		**43.6**		-	
Benzo(k)fluoranthene	mg/kg	11	11	210	1,700	49,000	-	-	-		-		-		**17.5**	M-05	-	
Dibenz(a,h)anthracene	mg/kg	0.11	**0.11**	**2.1**	17	490	-	-	-		**0.311**	U	-		**4.88**		-	
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**1.1**	**21**	170	4,900	-	-	-		-		-		**26.3**		-	

NOTES:
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
U = not detected above method detection limit shown
ND = not detected
Bold denotes concentration above laboratory method reporting limit.
Color denotes detected concentration exceeds DEQ RBC screening criteria.
Gray Shading denotes detected concentration exceeds DEQ Clean Fill Criteria.
Italics and underline denotes detected concentration exceeds EPA Lead Screening Criteria
** denotes the DEQ RBC for Lead will not be used as the remediation goal. The EPA remediation goal of 100 mg/kg will be used instead.
1 = Oregon Department of Environmental Quality, Clean Fill Determinations, Dated February 21, 2019.
2 = Oregon Department of Environmental Quality, Table 1: Regional Default Background Concentrations for Metals in Soil, revised March 20, 2013.
3 = Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised May 2018.
4 = EPA Updated Soil Lead Guidance for Cercla Sites and RCRA Corrective Action Facilities, January 2024. Screening Level of 100 mg/kg selected due to the property's remedial action for residential use.
5 = EPA Maximum Concentration of Contaminants for the Toxicity Characteristic (Table 1).
The leaching to groundwater exposure pathway was removed based on the depth to groundwater at the property (greater than 65 feet).
The volatilization to outdoor air and vapor intrusion into buildings exposure pathways were removed from this table since there were no exceedances.
The remediation level for arsenic is the DEQ Clean Fill Criteria value of 8.8 mg/kg.
Samples analyzed by Apex Laboratories of Tigard, Oregon.
F-03 = The result for this hydrocarbon range is elevated du to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
M-05 = Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.

APPENDIX A

Geophysical Survey Report for the Property

PACIFIC GEOPHYSICS

LETTER REPORT

PROJECT #: 200705
SURVEY DATE: 8/20-21/20

Jill Betts
Coles and Betts Environmental Consulting

UST Survey - Vacant Lot
N Williams Avenue and NE Russell Street Block
Portland, Oregon

A geophysical survey was conducted across the city block bordered by N. Williams Avenue, NE Russell Street, NE Knott Street and N. Vancouver Avenue in Portland, Oregon for Coles and Betts. The site is presently a grass-covered, flat, vacant lot. In the past, the property contained several residences and buildings including a paint store and warehouse, two cleaners, a printing shop, and an insect-powder manufacturer. The scope of this survey was to detect possible underground storage tanks (USTs) and/or excavations from which tanks had been removed, and remnants of the old structures. The adjacent sidewalks and the southern part of N. Knott Street from the curb to the parking lines to the north were included. No surface evidence of USTs, including fill ports and vent pipes, was seen in the survey areas.

A Geometrics G858 cesium-vapor magnetometer was used to collect magnetic data across the sidewalk. Data were collected along parallel survey lines established using a measuring wheel and tapes. Each data point was located to an accuracy of about 1 foot using a Geode 2 sub-meter-accuracy GPS system. Figure 1 shows the site location as well as magnetic data points.

Figure 2 shows the result of the magnetic survey. Data are contoured using a contour interval of 500 nT (nanoTesla). In the figure, magnetic anomalies higher in amplitude than the normal local magnetic background are shown in red and are usually found over areas where ferrous objects are located below the sensor, carried at a height of about 3 feet. USTs usually produce red-colored anomalies. Magnetic anomalies at or below the amplitude of the local magnetic field are shown in blue and are generally caused by ferrous objects located above the sensor. Telephone poles, metallic street signs and bollards located along the sidewalks created magnetic interference. A small UST located near these objects could have been missed.

This site was relatively clear of large buried metallic objects. A Schonstedt magnetic gradiometer and an Aqua-Tronics Tracer metal detector were used to locate and investigate the anomalies shown in the figure. The Tracer is excellent at determining if a buried object is linear (a possible pipe) or 3D (a possible UST). The anomalies were also examined using a GSSI SIR2000 ground-penetrating radar (GPR) system connected to a 400-MHz antenna during the subsequent ground penetrating radar (GPR) survey. None of the objects appeared to be three-dimensional; most appeared to be caused by pipes or surface features. They did not appear to be USTs.

Magnetometer Anomalies:
A- possible pipe
B- underground pipes
C- surface object
D- not a 3D object
E- surface feature – bollard and sign
F- not a 3D object
G- not a 3D object
H- underground pipes
I- underground pipe, bollard
J- surface features
K- reinforced concrete
L- decorative wall

The entire site was scanned using the GSSI GPR system. Traverses were made along survey lines set approximately 5 feet apart. The quality of the data was adequate to detect features within the top 2 to 3 feet.

Several large, "flat" zones were detected just below the ground surface (Figure 3). One, near the B anomalies, could be related to a former building (Insect Powder Manufacturer). These flat zones could be remnants of slab building floors. One disturbed soil zone (DSZ) was detected. It could be a former excavation. Several other GPR anomalies were detected; however, their identity could not be determined. They did not appear to contain metal and were only seen in one or two adjacent profiles.

No USTs were detected with this survey across the accessible areas of the site.

Jeff Mann and Nikos Tzetos of Pacific Geophysics conducted the survey for Ms. Jill Betts of Coles and Betts Environmental Consulting on August 20 and 21, 2020. This letter report was written by Jeff Mann, reviewed by Nikos Tzetos, and emailed to Ms. Betts on September 1, 2020.

Limitations

The conclusions presented in this report were based upon widely accepted geophysical principles, methods and equipment. This survey was conducted with limited knowledge of the site, the site history and the subsurface conditions.

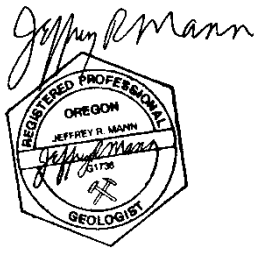
The goal of near-surface geophysics is to provide a rapid means of characterizing the subsurface using non-intrusive methods. Conclusions based upon these methods are generally reliable; however, due to the inherent ambiguity of the methods, no single interpretation of the data can be made. As an example, rocks and roots produce radar reflections that may appear the same as pipes and tanks.

Under reasonable conditions, geophysical surveys are good at detecting changes in the subsurface caused by man-made objects or changes in subsurface conditions, but they are poor at actually identifying those objects or subsurface conditions.

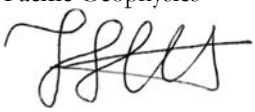
Objects of interest are not always detectable due to surface and subsurface conditions. The deeper an object is buried, the more difficult it is to detect, and the less accurately it can be located.

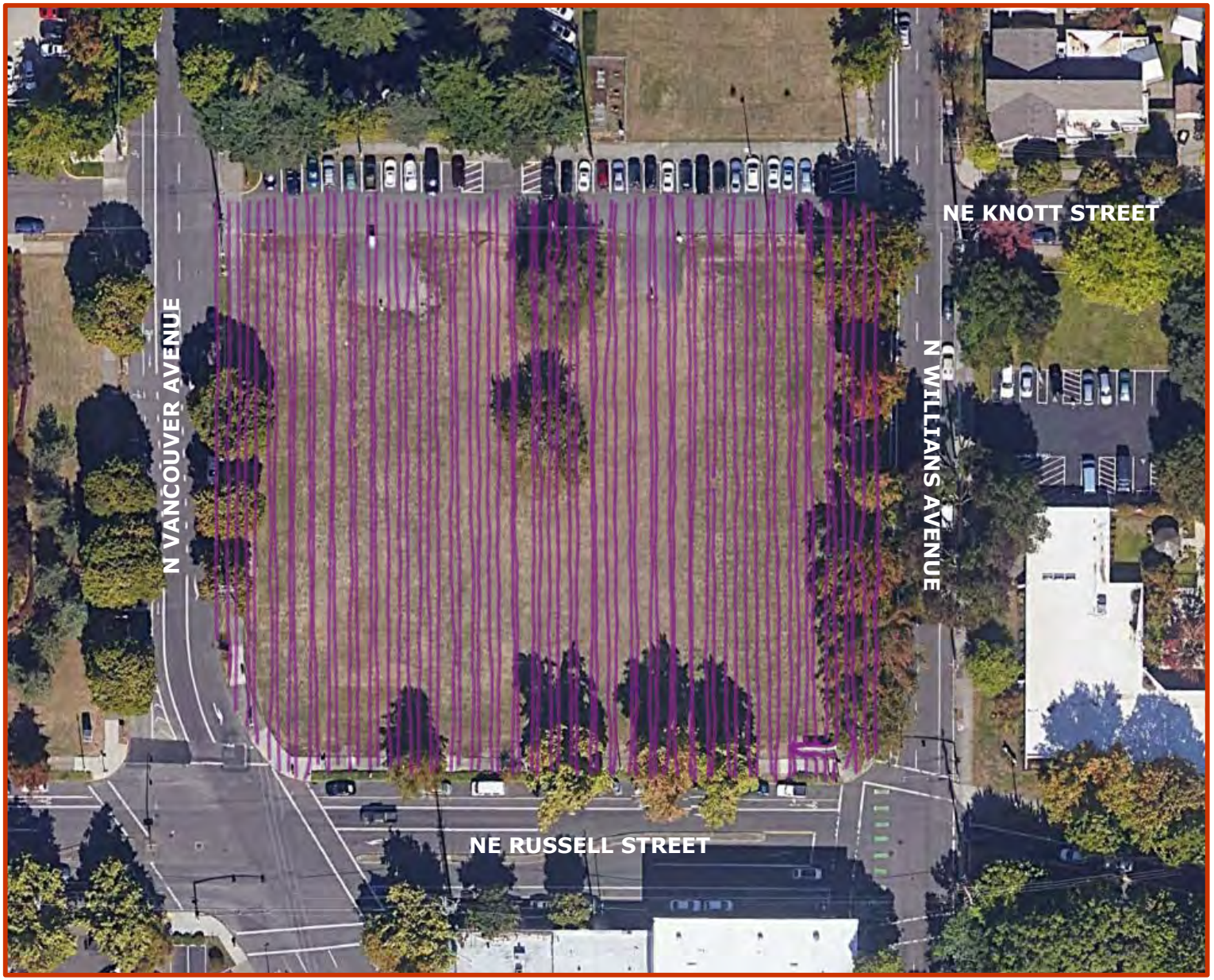
The only way to see an object is to physically expose it.

Jeff Mann — August 24, 2020
Pacific Geophysics



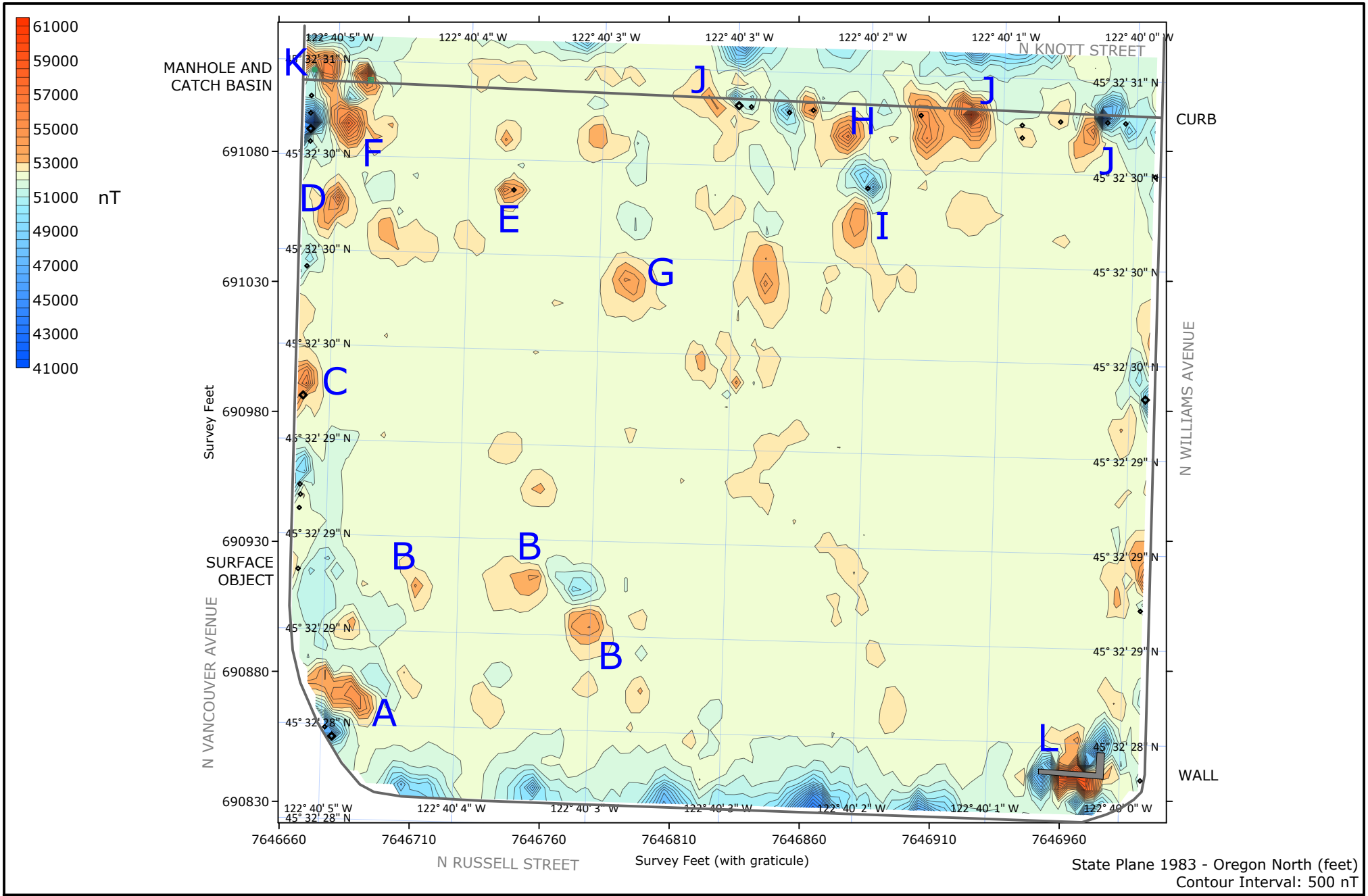
Nikos Tzetos — August 29, 2020
Pacific Geophysics





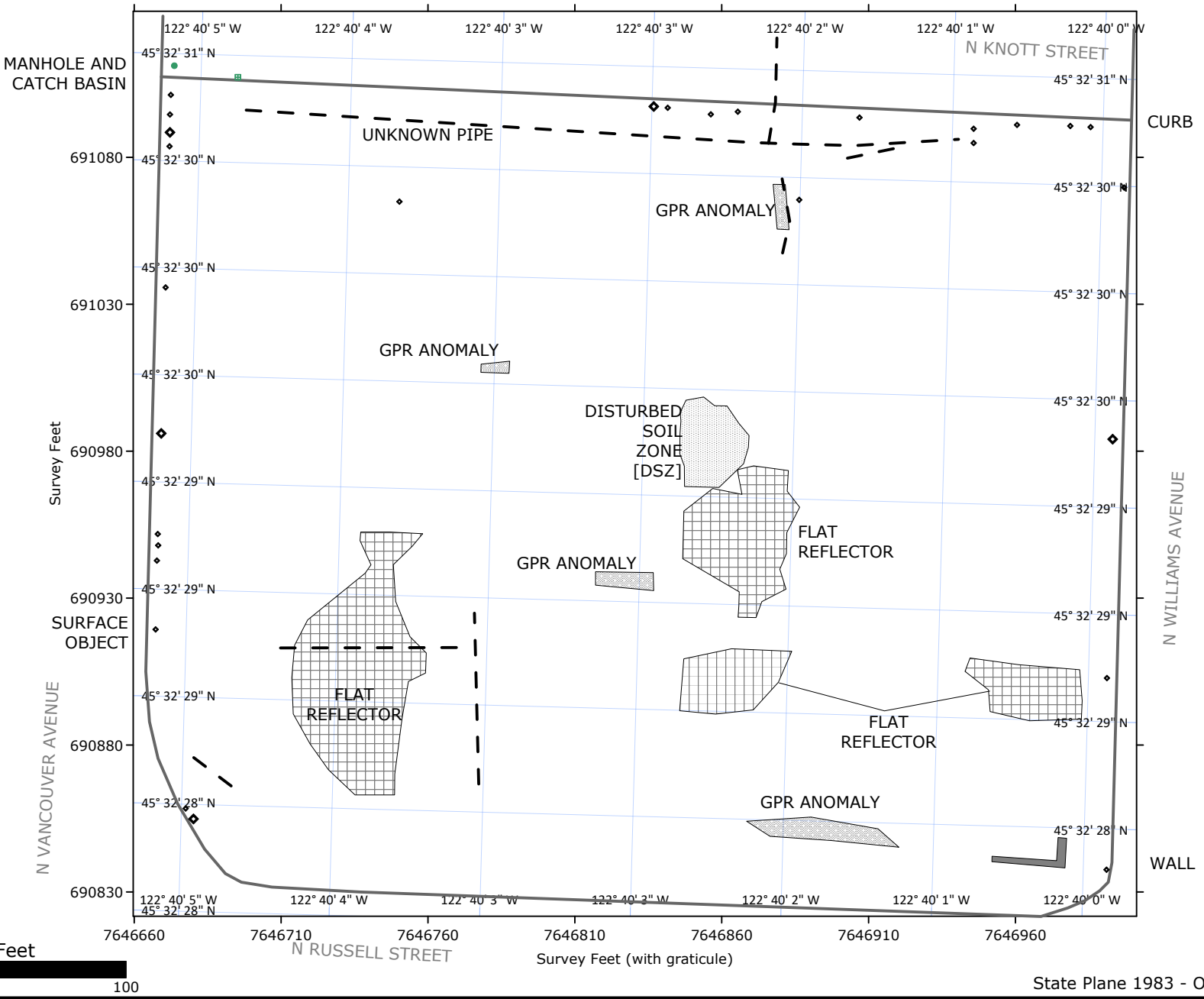
PACIFIC GEOPHYSICS

FIGURE 1	Survey Location and Coverage	
	Project: 200705	Vacant Lot N Russell Str. at N Vancouver Ave. Portland, Oregon
	Drawn by : NT	Prepared for: Coles & Betts
		Base Photo from Google Earth



PACIFIC GEOPHYSICS

FIGURE	Magnetic Contour Map	
2	Project: 200705	Vacant Lot N Russell Str. at N Vancouver Ave. Portland, Oregon
	Drawn by : NT	Prepared for: Coles & Betts
		Survey Date: 8/20-21/2020



PACIFIC GEOPHYSICS

FIGURE	Interpretation Map	
3	Project: 200705	Vacant Lot N Russell Str. at N Vancouver Ave. Portland, Oregon
	Drawn by : NT	Prepared for: Coles & Betts
		Survey Date: 8/20-21/2020

Appendix A. Geophysical Survey Methods

Magnetometer Surveys

Small disturbances in the Earth's local magnetic field are called "magnetic anomalies". These may be caused by naturally occurring features such as metallic mineral ore bodies, or from manmade features such as metal buildings, vehicles, fences, and underground storage tanks. The magnetometer only detects changes produced by ferrous objects. Aluminum and brass are non-ferrous metals and cannot be detected using a magnetometer.

A magnetometer is an electronic instrument designed to detect small changes in the Earth's local magnetic field. Over the years different technologies have been used in magnetometers. The Geometrics G-858 Portable Cesium Magnetometer used to collect magnetic data for Pacific Geophysics uses one of the most recent methods to detect magnetic anomalies. A detailed discussion describing the method this unit uses is available at Geometrics.com.

This magnetometer enables the operator to collect data rapidly and continuously rather than the older instruments that collected data at discreet points only. The G-858 is carried by hand across the site. The sensor is carried at waist level. Typically individual data points collected at normal walking speed are about 6" apart along survey lines usually 5 feet apart, depending on the dimensions of the target objects.

It is critical to know the exact location of each data point so that if an anomaly is detected it can be accurately plotted on a magnetic contour map. At most small sites, data are collected along straight, parallel survey lines set up on the site before the data collection stage begins. For very large, complex sites, the G-858 can be connected to a Global Positioning System (GPS) antenna which allows the operator to collect accurately-located data without establishing a survey grid. With GPS, data are collected and positioned wherever the operator walks. A limitation using GPS is that the GPS antenna must have line of sight with the GPS satellites. Data can be mislocated if the GPS antenna is under trees or near tall buildings.

Data are stored in the unit's memory for later downloading and processing. A magnetic contour map of the data is plotted in the field. Geographical features are plotted on the map. Magnetic anomalies appearing to be caused by objects of interest are then investigated on the site using several small hand-held metal detectors. If an object appears to be a possible object of interest, it may be investigated with GPR.

Magnetic contour maps may be printed in color in order to highlight anomalies caused by ferrous objects located under the magnetic sensor. Usually, ferrous objects situated below the sensor produce magnetic "highs" and anomalies located above the sensor produce magnetic "lows". Magnetic highs are of interest to the operator since most objects of interest are located underground.

Depending on the orientation, shape and mass of a metallic object, a high/low pair of magnetic anomalies may be present. In the northern hemisphere the magnetic low is located north of the object and the magnetic high toward the south. The object producing the anomaly is located part way between the high and the low anomalies.

Magnetometer surveys have limitations. Magnetometers only detect objects made of ferrous (iron-containing) metal. Large ferrous objects (buildings, cars, fences, etc.) within several feet of the magnetometer create interference that may hide the anomaly produced by a nearby object of interest.

Ground Penetrating Radar

A Geophysical Survey Systems, Inc. (GSSI) SIR-2000 GPR system coupled to GSSI antennas of various central frequencies is used to obtain the radar data for our surveys.

GPR antennas both transmit and receive electromagnetic energy. EM energy is transmitted into the material the antenna passes over. A portion of that energy is reflected back to the antenna and amplified. Reflections are displayed in real-time in a continuous cross section. Reflections are produced where there is a sufficient electrical contrast between two materials. Changes in the electrical properties (namely the dielectric constant) that produce radar reflections are caused by changes in the moisture content, porosity, mineralogy, and texture of the material. Metallic objects of interest exhibit a strong electrical contrast with the surrounding material and thus produce relatively strong reflections. Non-metallic objects of interest (septic tanks, cesspools, dry wells, and PVC and clay tile pipes) are not always good reflectors.

Radar data are ambiguous. It can be difficult to distinguish the reflection produced by an object of interest from the reflection caused by some natural feature. Rocks or tree roots have reflections that appear similar to reflections from pipes. In concrete investigations reflections produced by metal rebar look exactly like those from electrical conduit or post-tension cables. Objects with too small an electrical contrast may produce no reflections at all and may be missed. Target objects buried below objects with contrasting properties that also produce reflections may be missed (e.g. USTs below roots, concrete pieces, pipes or rocks). If an object of interest like a UST is buried below the depth of penetration of the radar signal, it will be missed.

In addition to interpreting ambiguous data, radar has several limitations that cannot be controlled by the operator. The radar signal is severely attenuated by electrically conductive material, including wet, clay-rich soil and reinforced concrete. The quality of the data is affected by the surface conditions over which the antenna is pulled. Ideally the antenna should rest firmly on a smooth surface. Rough terrain and tall grass reduce the quality of radar data.

It is the job of an experienced interpreter to examine the GPR profiles and deduce if reflections are from objects of interest. A GPR interpreter cannot see underground, but can only interpret reflections based on experience.

The only way to truly identify an object is to excavate.

Hand-held Metal detectors

Two small, non-recording metal detectors are used to locate suspect magnetic anomalies detected using the G-858 Magnetometer in order to determine the likely cause of the anomaly. First, the magnetic contour map and a Schonstedt Magnetic Gradiometer are used to locate the center of the magnetic anomalies.

Once the anomaly is located an Aqua-Tronics Tracer is used to determine if the object producing the anomaly is a possible object of interest. Most anomalies are at least in part produced by features observed on the ground surface.

Schonstedt Magnetic Gradiometer: This magnetometer has two magnetic sensors separated vertically by 10". The magnetic field surrounding a ferrous object is strongest near the object and decreases rapidly as the distance increases. If the magnitude measured by the sensor located in the tip of the Schonstedt is very high, and the magnetic field measured by the sensor located farther up the shaft of the Schonstedt is low, there is a large vertical magnetic gradient and the instrument responds with a loud whistle indicating the object is near the surface. If there is a small difference in the magnitudes measured by the two sensors, the object is deeper. The instrument responds with a softer tone. A discussion of this instrument is available at Schonstedt.com.

Aqua-Tronics A-6 Tracer: The Aqua-Tronics A-6 Tracer uses a different method of detecting metallic objects. This instrument measures the electrical conductivity of a metal object. It is capable of detecting any electrically conductive metal, including non-ferrous aluminum and brass. The Tracer is capable of detecting three-dimensional objects as well as pipes.

The Tracer consists of a transmitter coil and a receiver coil. In the absence of any electrically conductive material in the vicinity of the Tracer, the electromagnetic field around each coil is balanced.

Basically the electromagnetic field produced by the transmitter induces an electric current into the area surrounding the instrument. Nearby conductive objects distort the EM field. The balance between the two coils is disturbed and the instrument produces an audible tone and meter indication.

Radio Detection RD8000 PDL pipe and cable detector: This instrument may be used to detect buried, conductive pipes and utilities. It consists of a transmitter and a receiver and can be used in two configurations.

The transmitter may be used to directly apply a small electrical current to exposed, electrically conductive pipes and utilities. The RD receiver is then able to "trace" the underground portion of the pipe or utility, under some conditions for several hundred feet. The transmitter can also induce an electrical current into buried pipes and utilities where direct contact is not available.

The receiver can also be used alone. It has the capability to locate pipes and utilities by detecting the very small electrical currents induced into the features by nearby AM/FM radio stations.

The receiver also has an AC power function that may be used to detect underground power lines.

APPENDIX B

Phase II ESA Data Tables and Analytical Laboratory Report and Chain of Custody Documentation for the Property

Table 1. Summary of Soil Analytical Data

	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	OR DEQ RBC Volatilization to Outdoor Air (Urban Residential)[3]	OR DEQ RBC Volatilization to Outdoor Air (Occupational)[3]	OR DEQ RBC Vapor Intrusion into Buildings (Occupational)[3]	OR DEQ RBC Soil Leaching to Groundwater (Urban Residential)[3]	OR DEQ RBC Soil Leaching to Groundwater (Occupational)[3]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[4]	12/7/20 B1 3-3.5		12/7/20 B4 2-2.3		12/7/20 B4 5-5.5		12/7/20 B5 0.5-1		12/7/20 B6 0.5-1		12/7/20 B10 1-2		12/7/20 B10 2-2.5		12/7/20 B12 1-1.5	
Total Metals EPA 6020																												
Arsenic	mg/kg	8.8	**1**	**1.9**	**15**	420	-	-	-	-	-	-											**4.63**				**3.97**	
Barium	mg/kg	790	31,000	220,000	69,000	-	-	-	-	-	-	-											**238**				**246**	
Cadmium	mg/kg	0.63	160	1,100	350	9,700	-	-	-	-	-	-											**3.39**				**0.887**	
Chromium	mg/kg	76	230,000	-	530,000	-	-	-	-	-	-	-											**17.8**				**18.7**	
Lead	mg/kg	27	**400**	**800**	**800**	**800**	-	-	-	**30**	**30**	-											**717**		**10.9**		**227**	
Mercury	mg/kg	0.23	47	350	110	2,900	-	-	-	-	-	-											**0.810**				**0.191**	
Selenium	mg/kg	0.71	-	-	-	-	-	-	-	-	-	-											1.14	U			1.09	U
Silver	mg/kg	2.6	780	5,800	1,800	49,000	-	-	-	-	-	-											**0.433**				0.217	U
TCLP Mtals by EPA 6020B (ICPMS)																												
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	5											**0.146**				**0.0668**	
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																												
Gasoline-Range	mg/kg	31	2,500	20,000	9,700	-	5,900	-	-	31	130	-	6.28	U			6.95	U	6.22	U	11.2	U			6.96	U	5.28	U
Diesel-Range	mg/kg	1,100	2,200	14,000	4,600	-	-	-	-	9,500	-	-															1,050	U
Oil-Range	mg/kg	2,800	5,700	36,000	11,000	-	-	-	-	-	-	-															**4,240**	F-03
Volatile Organic Compounds by EPA 5035A/8260C																												
Benzene	mg/kg	0.023	24	37	380	11,000	27	50	2.1	0.02	0.10	-	0.0126	U			0.0139	U	0.0124	U	0.0223	U			0.0139	U	0.0106	U
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-	0.126	U			0.139	U	0.124	U	0.223	U			0.139	U	**0.439**	
Tetrachloroethene (PCE)	mg/kg	0.18	540	1,000	1,800	50,000	-	-	36	1.9	1.9	-	0.0314	U			0.0348	U	0.0311	U	0.0558	U			0.0348	U	0.0264	U
All other VOCs													ND				ND		ND		ND				ND		ND	
Polychlorinated Biphenyls by EPA 8082A																												
Aroclor 1254	mg/kg	0.041	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-																
Aroclor 1260	mg/kg	0.23	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-																
All other PCBs	mg/kg																											
Organochlorine Pesticides by EPA 8081B																C-05												
All Pesticides	mg/kg														ND													
Semivolatile Organic Compounds by EPA 8270E																												
Acenaphthene	mg/kg	0.25	9,400	7,000	21,000	590,000	-	-	-	-	-	-																
Acenaphthylene	mg/kg	120	-	-	-	-	-	-	-	-	-	-																
Anthracene	mg/kg	6.8	47,000	350,000	110,000	-	-	-	-	-	-	-																
Benzo(a)anthracene	mg/kg	0.73	**2.5**	**21**	170	4,800	-	-	-	6	-	-																
Benzo(a)pyrene	mg/kg	0.11	**0.25**	**2.1**	**17**	490	-	-	-	-	-	-																
Benzo(b)fluoranthene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-																
Benzo(k)fluoranthene	mg/kg	11	25	210	1,700	49,000	-	-	-	-	-	-																
Benzo(g,h,i)perylene	mg/kg	25	-	-	-	-	-	-	-	-	-	-																
Chrysene	mg/kg	3.1	250	2,100	17,000	490,000	-	-	-	-	-	-																
Dibenz(a,h)anthracene	mg/kg	0.11	**0.25**	**2.1**	17	490	-	-	-	-	-	-																
Fluoranthene	mg/kg	10	4,800	30,000	10,000	280,000	-	-	-	-	-	-																
Fluorene	mg/kg	3.7	6,300	47,000	14,000	390,000	-	-	-	-	-	-																
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-																
2-Methylnaphthalene	mg/kg	-	-	-	-	-	-	-	-	-	-	-																
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-																
Phenanthrene	mg/kg	5.5	-	-	-	-	-	-	-	-	-	-																
Pyrene	mg/kg	10	3,600	23,000	75,000	210,000	-	-	-	-	-	-																
Carbazole	mg/kg	79	-	-	-	-	-	-	-	-	-	-																
Dibenzofuran	mg/kg	0.002	-	-	-	-	-	-	-	-	-	-																
All other SVOCs	mg/kg																											

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mg/L = milligrams per liter
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Bold denotes concentration above laboratory method reporting limit.
Color denotes detected concentration exceeds DEQ RBC screening criteria.
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4 = EPA Maximum Concentration of Contaminants for the Toxicity Characteristic (Table 1).

Samples analyzed by Apex Laboratories of Tigard, Oregon.
C-05 = Extract has undergone a Gel-Permeation Chromatography cleanup per EPA 3640A. Reporting levels may be raised due to dilution necessary for cleanup.
C-07 = Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
F-03 = The result for this hydrocarbon range is elevated du to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
M-05 = Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
P-12 = Result estimated due to the presencde of multiple PCB Aroclors and/or PCB cogeners not defined as Aroclors.
Q-42 = Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits.

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	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	OR DEQ RBC Volatilization to Outdoor Air (Urban Residential)[3]	OR DEQ RBC Volatilization to Outdoor Air (Occupational)[3]	OR DEQ RBC Vapor Intrusion into Buildings (Occupational)[3]	OR DEQ RBC Soil Leaching to Groundwater (Urban Residential)[3]	OR DEQ RBC Soil Leaching to Groundwater (Occupational)[3]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[4]	12/7/20 B13 1-2		12/7/20 B13 8.5-9		12/7/20 B14 0.5-1		12/7/20 B15 0.5-1		12/7/20 B15 7.5-8.5		12/7/20 B15 9-9.5		12/7/20 B16 5.5-6	
Total Metals EPA 6020																										
Arsenic	mg/kg	8.8	1	1.9	15	420	-	-	-	-	-	-									5.63				8.56	
Barium	mg/kg	790	31,000	220,000	69,000	-	-	-	-	-	-	-									172				228	
Cadmium	mg/kg	0.63	160	1,100	350	9,700	-	-	-	-	-	-									0.254	U			0.464	
Chromium	mg/kg	76	230,000	-	530,000	-	-	-	-	-	-	-									20.5				25.0	
Lead	mg/kg	27	400	800	800	800	-	-	-	30	30	-			8.36						48.4				62.5	
Mercury	mg/kg	0.23	47	350	110	2,900	-	-	-	-	-	-									0.102	U			0.0980	U
Selenium	mg/kg	0.71	-	-	-	-	-	-	-	-	-	-									1.27	U			1.23	U
Silver	mg/kg	2.6	780	5,800	1,800	49,000	-	-	-	-	-	-									0.254	U			0.245	U
TCLP Mtals by EPA 6020B (ICPMS)																										
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	5														
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																										
Gasoline-Range	mg/kg	31	2,500	20,000	9,700	-	5,900	-	-	31	130	-	6.22	U			4.65	U	6.27	U	5.88	U				
Diesel-Range	mg/kg	1,100	2,200	14,000	4,600	-	-	-	-	9,500	-	-			25	U					25	U	25	U	25	U
Oil-Range	mg/kg	2,800	5,700	36,000	11,000	-	-	-	-	-	-	-			50	U					93.9	F-03	50	U	50	U
Volatile Organic Compounds by EPA 5035A/8260C																										
Benzene	mg/kg	0.023	24	37	380	11,000	27	50	2.1	0.02	0.10	-	0.0124	U			0.00931	U	0.0125	U	0.0118	U				
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	0.37	0.34	-	0.124	U			0.0931	U	0.125	U	0.118	U				
Tetrachloroethene (PCE)	mg/kg	0.18	540	1,000	1,800	50,000	-	-	36	1.9	1.9	-	0.0311	U			0.0233	U	0.0313	U	0.0294	U				
All other VOCs													ND				ND		ND		ND					
Polychlorinated Biphenyls by EPA 8082A																										
Aroclor 1254	mg/kg	0.041	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-														
Aroclor 1260	mg/kg	0.23	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-														
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Organochlorine Pesticides by EPA 8081B																										
All Pesticides	mg/kg																									
Semivolatile Organic Compounds by EPA 8270E																										
Acenaphthene	mg/kg	0.25	9,400	7,000	21,000	590,000	-	-	-	-	-	-														
Acenaphthylene	mg/kg	120	-	-	-	-	-	-	-	-	-	-														
Anthracene	mg/kg	6.8	47,000	350,000	110,000	-	-	-	-	-	-	-														
Benzo(a)anthracene	mg/kg	0.73	2.5	21	170	4,800	-	-	-	6	-	-														
Benzo(a)pyrene	mg/kg	0.11	0.25	2.1	17	490	-	-	-	-	-	-														
Benzo(b)fluoranthene	mg/kg	1.1	2.5	21	170	4,900	-	-	-	-	-	-														
Benzo(k)fluoranthene	mg/kg	11	25	210	1,700	49,000	-	-	-	-	-	-														
Benzo(g,h,i)perylene	mg/kg	25	-	-	-	-	-	-	-	-	-	-														
Chrysene	mg/kg	3.1	250	2,100	17,000	490,000	-	-	-	-	-	-														
Dibenz(a,h)anthracene	mg/kg	0.11	0.25	2.1	17	490	-	-	-	-	-	-														
Fluoranthene	mg/kg	10	4,800	30,000	10,000	280,000	-	-	-	-	-	-														
Fluorene	mg/kg	3.7	6,300	47,000	14,000	390,000	-	-	-	-	-	-														
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	2.5	21	170	4,900	-	-	-	-	-	-														
2-Methylnaphthalene	mg/kg	-	-	-	-	-	-	-	-	-	-	-														
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	0.37	0.34	-														
Phenanthrene	mg/kg	5.5	-	-	-	-	-	-	-	-	-	-														
Pyrene	mg/kg	10	3,600	23,000	75,000	210,000	-	-	-	-	-	-														
Carbazole	mg/kg	79	-	-	-	-	-	-	-	-	-	-														
Dibenzofuran	mg/kg	0.002	-	-	-	-	-	-	-	-	-	-														
All other SVOCs	mg/kg																									

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Total Metals EPA 6020																								
Arsenic	mg/kg	8.8	**1**	**1.9**	**15**	420	-	-	-	-	-	-					**7.56**						**7.83**	
Barium	mg/kg	790	31,000	220,000	69,000	-	-	-	-	-	-	-					**315**						**228**	
Cadmium	mg/kg	0.63	160	1,100	350	9,700	-	-	-	-	-	-					**0.637**						**0.310**	
Chromium	mg/kg	76	230,000	-	530,000	-	-	-	-	-	-	-					**23.2**						**24.0**	
Lead	mg/kg	27	**400**	**800**	**800**	**800**	-	-	-	**30**	**30**	-					**308**		**7.37**				**102**	
Mercury	mg/kg	0.23	47	350	110	2,900	-	-	-	-	-	-					0.0963	U					0.104	U
Selenium	mg/kg	0.71	-	-	-	-	-	-	-	-	-	-					1.20	U					1.30	U
Silver	mg/kg	2.6	780	5,800	1,800	49,000	-	-	-	-	-	-					0.241	U					0.259	U
TCLP Mtals by EPA 6020B (ICPMS)																								
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	5					0.0500	U					0.0500	U
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																								
Gasoline-Range	mg/kg	31	2,500	20,000	9,700	-	5,900	-	-	31	130	-			5.85	U	6.38	U					6.26	U
Diesel-Range	mg/kg	1,100	2,200	14,000	4,600	-	-	-	-	9,500	-	-	25	U			25	U			25.2	U	25	U
Oil-Range	mg/kg	2,800	5,700	36,000	11,000	-	-	-	-	-	-	-	50	U			50	U			50.4	U	50	U
Volatile Organic Compounds by EPA 5035A/8260C																								
Benzene	mg/kg	0.023	24	37	380	11,000	27	50	2.1	0.02	0.10	-			0.0117	U	0.0128	U					0.0125	U
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-			0.117	U	0.128	U					0.125	U
Tetrachloroethene (PCE)	mg/kg	0.18	540	1,000	1,800	50,000	-	-	36	1.9	1.9	-			0.0292	U	0.0319	U					0.0313	U
All other VOCs															ND		ND						ND	
Polychlorinated Biphenyls by EPA 8082A																								
Aroclor 1254	mg/kg	0.041	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-												
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Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-												
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Carbazole	mg/kg	79	-	-	-	-	-	-	-	-	-	-												
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													B19 12-13	C001		C002		C003		C004		C005		C006	
Total Metals EPA 6020																									
Arsenic	mg/kg	8.8	**1**	**1.9**	**15**	420	-	-	-	-	-	-		**13.8**		**25.7**		**6.37**		**6.05**		**6.76**		**7.30**	
Barium	mg/kg	790	31,000	220,000	69,000	-	-	-	-	-	-	-		**738**		**180**		**141**	Q-42	**613**		**231**		**232**	
Cadmium	mg/kg	0.63	160	1,100	350	9,700	-	-	-	-	-	-		**0.871**		**0.284**		**0.542**		**0.936**		**0.315**		**0.577**	
Chromium	mg/kg	76	230,000	-	530,000	-	-	-	-	-	-	-		**21.0**		**18.3**		**16.1**		**31.9**		**19.5**		**21.4**	
Lead	mg/kg	27	**400**	**800**	**800**	**800**	-	-	-	**30**	**30**	-	**7.78**	**1,720**		**98.8**		**77.5**	Q-42	**355**		**60.4**		**116**	
Mercury	mg/kg	0.23	47	350	110	2,900	-	-	-	-	-	-		**0.175**		**0.119**		0.109	U	**0.292**		0.0964	U	**1.38**	
Selenium	mg/kg	0.71	-	-	-	-	-	-	-	-	-	-		1.20	U	1.20	U	1.37	U	1.22	U	1.20	U	1.31	U
Silver	mg/kg	2.6	780	5,800	1,800	49,000	-	-	-	-	-	-		0.239	U	0.241	U	0.274	U	**0.511**		0.241	U	0.261	U
TCLP Mtals by EPA 6020B (ICPMS)																									
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	5		**0.994**						0.0500	U			0.0500	U
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																									
Gasoline-Range	mg/kg	31	2,500	20,000	9,700	-	5,900	-	-	31	130	-													
Diesel-Range	mg/kg	1,100	2,200	14,000	4,600	-	-	-	-	9,500	-	-		220	U	25	U	25	U	929	U	25	U	25	U
Oil-Range	mg/kg	2,800	5,700	36,000	11,000	-	-	-	-	-	-	-		**498**		50	U	**266**	F-03	**4,680**	F-03	50	U	**87.0**	F-03
Volatile Organic Compounds by EPA 5035A/8260C																									
Benzene	mg/kg	0.023	24	37	380	11,000	27	50	2.1	0.02	0.10	-													
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-													
Tetrachloroethene (PCE)	mg/kg	0.18	540	1,000	1,800	50,000	-	-	36	1.9	1.9	-													
All other VOCs																									
Polychlorinated Biphenyls by EPA 8082A															C-07						C-07				
Aroclor 1254	mg/kg	0.041	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-		**0.0172**	P-12					0.0116	U				
Aroclor 1260	mg/kg	0.23	0.33	0.59	4.9	140	-	-	-	1.1	1.1	-		**0.0132**	P-12					0.0116	U				
All other PCBs	mg/kg													ND						ND					
Organochlorine Pesticides by EPA 8081B																									
All Pesticides	mg/kg																								
Semivolatile Organic Compounds by EPA 8270E																									
Acenaphthene	mg/kg	0.25	9,400	7,000	21,000	590,000	-	-	-	-	-	-		0.311	U					**6.37**					
Acenaphthylene	mg/kg	120	-	-	-	-	-	-	-	-	-	-		0.311	U					**5.49**					
Anthracene	mg/kg	6.8	47,000	350,000	110,000	-	-	-	-	-	-	-		0.311	U					**13.7**					
Benzo(a)anthracene	mg/kg	0.73	**2.5**	**21**	170	4,800	-	-	-	6	-	-		0.311	U					**36.8**					
Benzo(a)pyrene	mg/kg	0.11	**0.25**	**2.1**	**17**	490	-	-	-	-	-	-		**0.664**						**46.8**					
Benzo(b)fluoranthene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-		**0.755**						**43.6**					
Benzo(k)fluoranthene	mg/kg	11	25	210	1,700	49,000	-	-	-	-	-	-		0.466	U					**17.5**	M-05				
Benzo(g,h,i)perylene	mg/kg	25	-	-	-	-	-	-	-	-	-	-		**0.583**						**27.6**					
Chrysene	mg/kg	3.1	250	2,100	17,000	490,000	-	-	-	-	-	-		**0.329**						**41.8**					
Dibenz(a,h)anthracene	mg/kg	0.11	**0.25**	**2.1**	17	490	-	-	-	-	-	-		**0.311**	U					**4.88**					
Fluoranthene	mg/kg	10	4,800	30,000	10,000	280,000	-	-	-	-	-	-		**0.392**						**80.2**					
Fluorene	mg/kg	3.7	6,300	47,000	14,000	390,000	-	-	-	-	-	-		0.311	U					**4.32**					
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-		**0.513**						**26.3**					
2-Methylnaphthalene	mg/kg	-	-	-	-	-	-	-	-	-	-	-		0.621	U					**1.43**					
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-		**0.621**	U					**3.31**					
Phenanthrene	mg/kg	5.5	-	-	-	-	-	-	-	-	-	-		0.311	U					**56.4**					
Pyrene	mg/kg	10	3,600	23,000	75,000	210,000	-	-	-	-	-	-		**0.396**						**93.0**					
Carbazole	mg/kg	79	-	-	-	-	-	-	-	-	-	-		0.466	U					**3.24**					
Dibenzofuran	mg/kg	0.002	-	-	-	-	-	-	-	-	-	-		0.311	U					**1.96**					
All other SVOCs	mg/kg													ND						ND					

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The RBCs for PCBs are for Total PCBs.

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C-07 = Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
F-03 = The result for this hydrocarbon range is elevated du to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
M-05 = Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
P-12 = Result estimated due to the presencde of multiple PCB Aroclors and/or PCB cogeners not defined as Aroclors.
Q-42 = Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits.

Table 3. Summary of Soil Analtyical Data Above DEQ Reference Levels

	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	OR DEQ RBC Volatilization to Outdoor Air (Urban Residential)[3]	OR DEQ RBC Volatilization to Outdoor Air (Occupational)[3]	OR DEQ RBC Vapor Intrusion into Buildings (Occupational)[3]	OR DEQ RBC Soil Leaching to Groundwater (Urban Residential)[3]	OR DEQ RBC Soil Leaching to Groundwater (Occupational)[3]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[4]	12/7/20 B10 1-2		12/7/20 B12 1-1.5		12/7/20 B15 7.5-8.5		12/7/20 B16 5.5-6		12/8/20 B17 5.5-7.5		12/8/20 B19 6.5-7		12/8/20 C001		12/8/20 C002	
Total Metals EPA 6020																												
Arsenic	mg/kg	8.8	**1**	**1.9**	**15**	420	-	-	-	-	-	-	**4.63**		**3.97**		**5.63**		**8.56**		**7.56**		**7.83**		**13.8**		**25.7**	
Cadmium	mg/kg	0.63	160	1,100	350	9,700	-	-	-	-	-	-	**3.39**		**0.887**		0.254	U	**0.464**		**0.637**		**0.310**		**0.871**		**0.284**	
Lead	mg/kg	27	**400**	**800**	**800**	**800**	-	-	-	**30**	**30**	-	**717**		**227**		**48.4**		**62.5**		**308**		**102**		**1,720**		**98.8**	
Mercury	mg/kg	0.23	47	350	110	2,900	-	-	-	-	-	-	**0.810**		**0.191**		0.102	U	0.0980	U	0.0963	U	0.104	U	**0.175**		**0.119**	
Selenium	mg/kg	0.71	-	-	-	-	-	-	-	-	-	-	1.14	U	1.09	U	1.27	U	1.23	U	1.20	U	1.30	U	1.20	U	1.20	U
TCLP Mtals by EPA 6020B (ICPMS)																												
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	5	**0.146**		**0.0668**						0.0500	U	0.0500	U	**0.994**			
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																												
Oil-Range	mg/kg	2,800	5,700	36,000	11,000	-	-	-	-	-	-	-			**4,240**	F-03	**93.9**	F-05	50	U	50	U	50	U	**498**		50	U
Volatile Organic Compounds by EPA 5035A/8260C																												
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-			**0.439**		0.118	U			0.128	U	0.125	U				
Semivolatile Organic Compounds by EPA 8270E																												
Acenaphthene	mg/kg	0.25	9,400	7,000	21,000	590,000	-	-	-	-	-	-													0.311	U		
Anthracene	mg/kg	6.8	47,000	350,000	110,000	-	-	-	-	-	-	-													0.311	U		
Benzo(a)anthracene	mg/kg	0.73	**2.5**	**21**	170	4,800	-	-	-	6	-	-													0.311	U		
Benzo(a)pyrene	mg/kg	0.11	**0.25**	**2.1**	**17**	490	-	-	-	-	-	-													**0.664**			
Benzo(b)fluoranthene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-													**0.755**			
Benzo(k)fluoranthene	mg/kg	11	25	210	1,700	49,000	-	-	-	-	-	-													0.466	U		
Benzo(g,h,i)perylene	mg/kg	25	-	-	-	-	-	-	-	-	-	-													**0.583**			
Chrysene	mg/kg	3.1	250	2,100	17,000	490,000	-	-	-	-	-	-													**0.329**			
Dibenz(a,h)anthracene	mg/kg	0.11	**0.25**	**2.1**	17	490	-	-	-	-	-	-													**0.311**	U		
Fluoranthene	mg/kg	10	4,800	30,000	10,000	280,000	-	-	-	-	-	-													**0.392**			
Fluorene	mg/kg	3.7	6,300	47,000	14,000	390,000	-	-	-	-	-	-													0.311	U		
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-													**0.513**			
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-													**0.621**	U		
Phenanthrene	mg/kg	5.5	-	-	-	-	-	-	-	-	-	-													0.311	U		
Pyrene	mg/kg	10	3,600	23,000	75,000	210,000	-	-	-	-	-	-													**0.396**			
Dibenzofuran	mg/kg	0.002	-	-	-	-	-	-	-	-	-	-													0.311	U		

NOTES:
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mg/L = milligrams per liter
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F-03 = The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
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Table 3. Summary of Soil Analtyical Data Above DEQ Reference Levels

	Unit	OR DEQ Clean Fill Criteria[1] and OR Background Metals for the Portland Basin[2]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Occupational)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)[3]	OR DEQ RBC Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker)[3]	OR DEQ RBC Volatilization to Outdoor Air (Urban Residential)[3]	OR DEQ RBC Volatilization to Outdoor Air (Occupational)[3]	OR DEQ RBC Vapor Intrusion into Buildings (Occupational)[3]	OR DEQ RBC Soil Leaching to Groundwater (Urban Residential)[3]	OR DEQ RBC Soil Leaching to Groundwater (Occupational)[3]	RCRA Hazardous Waste Characteristic Screening Level (mg/L)[4]	12/7/20 C003		12/7/20 C004		12/8/20 C005		12/7/20 C006	
Total Metals EPA 6020																				
Arsenic	mg/kg	8.8	**1**	**1.9**	**15**	420	-	-	-	-	-	-	**6.37**		**6.05**		**6.76**		**7.30**	
Cadmium	mg/kg	0.63	160	1,100	350	9,700	-	-	-	-	-	-	**0.542**		**0.936**		**0.315**		**0.577**	
Lead	mg/kg	27	**400**	**800**	**800**	**800**	-	-	-	**30**	**30**	-	**77.5**	Q-42	**355**		**60.4**		**116**	
Mercury	mg/kg	0.23	47	350	110	2,900	-	-	-	-	-	-	0.109	U	**0.292**		0.0964	U	**1.38**	
Selenium	mg/kg	0.71	-	-	-	-	-	-	-	-	-	-	1.37	U	1.22	U	1.20	U	1.31	U
TCLP Mtals by EPA 6020B (ICPMS)																				
Lead	mg/L	-	-	-	-	-	-	-	-	-	-	5			0.0500	U			0.0500	U
Total Petroleum Hydrocarbons by TPH-Gx and TPH-Dx																				
Oil-Range	mg/kg	2,800	5,700	36,000	11,000	-	-	-	-	-	-	-	**266**	F-03	**4,680**	F-03	50	U	**87.0**	F-03
Volatile Organic Compounds by EPA 5035A/8260C																				
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-								
Semivolatile Organic Compounds by EPA 8270E																				
Acenaphthene	mg/kg	0.25	9,400	7,000	21,000	590,000	-	-	-	-	-	-			**6.37**					
Anthracene	mg/kg	6.8	47,000	350,000	110,000	-	-	-	-	-	-	-			**13.7**					
Benzo(a)anthracene	mg/kg	0.73	**2.5**	**21**	170	4,800	-	-	-	6	-	-			**36.8**					
Benzo(a)pyrene	mg/kg	0.11	**0.25**	**2.1**	**17**	490	-	-	-	-	-	-			**46.8**					
Benzo(b)fluoranthene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-			**43.6**					
Benzo(k)fluoranthene	mg/kg	11	25	210	1,700	49,000	-	-	-	-	-	-			**17.5**	M-05				
Benzo(g,h,i)perylene	mg/kg	25	-	-	-	-	-	-	-	-	-	-			**27.6**					
Chrysene	mg/kg	3.1	250	2,100	17,000	490,000	-	-	-	-	-	-			**41.8**					
Dibenz(a,h)anthracene	mg/kg	0.11	**0.25**	**2.1**	17	490	-	-	-	-	-	-			**4.88**					
Fluoranthene	mg/kg	10	4,800	30,000	10,000	280,000	-	-	-	-	-	-			**80.2**					
Fluorene	mg/kg	3.7	6,300	47,000	14,000	390,000	-	-	-	-	-	-			**4.32**					
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**2.5**	**21**	170	4,900	-	-	-	-	-	-			**26.3**					
Naphthalene	mg/kg	0.077	25	23	580	16,000	15	83	83	**0.37**	**0.34**	-			**3.31**					
Phenanthrene	mg/kg	5.5	-	-	-	-	-	-	-	-	-	-			**56.4**					
Pyrene	mg/kg	10	3,600	23,000	75,000	210,000	-	-	-	-	-	-			**93.0**					
Dibenzofuran	mg/kg	0.002	-	-	-	-	-	-	-	-	-	-			**1.96**					

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Wednesday, February 10, 2021

Jill Betts
Coles & Betts Environmental Consulting
5741 NE Flanders Street
Portland, OR 97213

RE: A0L0287 - 281 - 281

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 A0L0287, which was received by the laboratory on 12/8/2020 at 2:06:00PM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	6.0 degC	Cooler #2	3.2 degC
Cooler #3	5.7 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.

Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1 3-3.5	A0L0287-01	Soil	12/07/20 09:20	12/08/20 14:06
B1 16.5-17	A0L0287-02	Soil	12/07/20 09:25	12/08/20 14:06
B4 2-2.3	A0L0287-03	Soil	12/07/20 09:45	12/08/20 14:06
B4 5-5.5	A0L0287-04	Soil	12/07/20 09:50	12/08/20 14:06
B5 0.5-1	A0L0287-05	Soil	12/07/20 10:05	12/08/20 14:06
B5 4-4.5	A0L0287-06	Soil	12/07/20 10:10	12/08/20 14:06
B6 0.5-1	A0L0287-07	Soil	12/07/20 10:30	12/08/20 14:06
B6 1.5-2	A0L0287-08	Soil	12/07/20 10:35	12/08/20 14:06
B9 0.5-1	A0L0287-09	Soil	12/07/20 10:40	12/08/20 14:06
B9 1.5-2	A0L0287-10	Soil	12/07/20 10:45	12/08/20 14:06
B10 1-2	A0L0287-11	Soil	12/07/20 10:55	12/08/20 14:06
B10 2-2.5	A0L0287-12	Soil	12/07/20 11:00	12/08/20 14:06
B13 1-2	A0L0287-13	Soil	12/07/20 11:20	12/08/20 14:06
B13 8.5-9	A0L0287-14	Soil	12/07/20 11:25	12/08/20 14:06
B14 0.5-1	A0L0287-15	Soil	12/07/20 13:00	12/08/20 14:06
B14 8.5-9	A0L0287-16	Soil	12/07/20 13:05	12/08/20 14:06
B15 0.5-1	A0L0287-17	Soil	12/07/20 13:35	12/08/20 14:06
B15 7.5-8.5	A0L0287-18	Soil	12/07/20 13:40	12/08/20 14:06
B15 9-9.5	A0L0287-19	Soil	12/07/20 13:45	12/08/20 14:06
B16 5.5-6	A0L0287-20	Soil	12/07/20 14:15	12/08/20 14:06
B16 10.5-11	A0L0287-21	Soil	12/07/20 14:20	12/08/20 14:06
B11 1-1.5	A0L0287-22	Soil	12/07/20 14:25	12/08/20 14:06
B12 1-1.5	A0L0287-23	Soil	12/07/20 14:35	12/08/20 14:06
B8 1-1.5	A0L0287-24	Soil	12/07/20 14:45	12/08/20 14:06
B2 0.5-1	A0L0287-25	Soil	12/07/20 15:00	12/08/20 14:06
B25 0.5-1	A0L0287-26	Soil	12/08/20 09:10	12/08/20 14:06
B7 0.5-1	A0L0287-27	Soil	12/08/20 09:25	12/08/20 14:06
B18 0.5-1.5	A0L0287-28	Soil	12/08/20 09:30	12/08/20 14:06
B18 5.5-6.5	A0L0287-29	Soil	12/08/20 09:40	12/08/20 14:06
B17 0.5-1.5	A0L0287-30	Soil	12/08/20 09:50	12/08/20 14:06
B17 5.5-7.5	A0L0287-31	Soil	12/08/20 09:55	12/08/20 14:06
B17 11.5-12.5	A0L0287-32	Soil	12/08/20 10:10	12/08/20 14:06
B19 6.5-7	A0L0287-33	Soil	12/08/20 10:55	12/08/20 14:06

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B19 12-13	A0L0287-34	Soil	12/08/20 11:00	12/08/20 14:06
B20 0.7-1.5	A0L0287-35	Soil	12/08/20 11:30	12/08/20 14:06
B20 12-12.5	A0L0287-36	Soil	12/08/20 11:35	12/08/20 14:06
B21 1-2	A0L0287-37	Soil	12/08/20 11:45	12/08/20 14:06
B22 3-3.5	A0L0287-38	Soil	12/08/20 12:00	12/08/20 14:06
B23 2-2.5	A0L0287-39	Soil	12/08/20 12:10	12/08/20 14:06
B24 1.5-2.9(A)	A0L0287-40	Soil	12/08/20 12:35	12/08/20 14:06
B24 1.5-2.9(B)	A0L0287-41	Soil	12/08/20 12:35	12/08/20 14:06
C001	A0L0287-42	Soil	12/08/20 12:35	12/08/20 14:06
C002	A0L0287-43	Soil	12/08/20 09:10	12/08/20 14:06
C003	A0L0287-44	Soil	12/07/20 09:20	12/08/20 14:06
C004	A0L0287-45	Soil	12/07/20 14:25	12/08/20 14:06
C005	A0L0287-46	Soil	12/08/20 09:50	12/08/20 14:06
C006	A0L0287-47	Soil	12/07/20 11:20	12/08/20 14:06

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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
B13 8.5-9 (A0L0287-14)				**Matrix: Soil**		**Batch: 0120773**		
Diesel	ND	---	25.0	mg/kg dry	1	12/21/20 22:42	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/21/20 22:42	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 52 %*		*Limits: 50-150 %*	*1*	*12/21/20 22:42*	*NWTPH-Dx*	
B15 7.5-8.5 (A0L0287-18)				**Matrix: Soil**		**Batch: 0120557**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 01:42	NWTPH-Dx	
Oil	**93.9**	---	50.0	mg/kg dry	1	12/16/20 01:42	NWTPH-Dx	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 78 %*		*Limits: 50-150 %*	*1*	*12/16/20 01:42*	*NWTPH-Dx*	
B15 9-9.5 (A0L0287-19)				**Matrix: Soil**		**Batch: 0120773**		
Diesel	ND	---	25.0	mg/kg dry	1	12/21/20 23:23	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/21/20 23:23	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 76 %*		*Limits: 50-150 %*	*1*	*12/21/20 23:23*	*NWTPH-Dx*	
B16 5.5-6 (A0L0287-20)				**Matrix: Soil**		**Batch: 0120451**		
Diesel	ND	---	25.0	mg/kg dry	1	12/11/20 22:26	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/11/20 22:26	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 93 %*		*Limits: 50-150 %*	*1*	*12/11/20 22:26*	*NWTPH-Dx*	
B16 10.5-11 (A0L0287-21)				**Matrix: Soil**		**Batch: 0120773**		
Diesel	ND	---	25.0	mg/kg dry	1	12/21/20 23:43	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/21/20 23:43	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 63 %*		*Limits: 50-150 %*	*1*	*12/21/20 23:43*	*NWTPH-Dx*	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 0120773**		
Diesel	ND	---	1050	mg/kg dry	50	12/22/20 00:04	NWTPH-Dx	
Oil	**4240**	---	2110	mg/kg dry	50	12/22/20 00:04	NWTPH-Dx	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: %*		*Limits: 50-150 %*	*50*	*12/22/20 00:04*	*NWTPH-Dx*	*S-01*
B18 5.5-6.5 (A0L0287-29)				**Matrix: Soil**		**Batch: 0120773**		
Diesel	ND	---	25.2	mg/kg dry	1	12/22/20 00:45	NWTPH-Dx	
Oil	ND	---	50.4	mg/kg dry	1	12/22/20 00:45	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 72 %*		*Limits: 50-150 %*	*1*	*12/22/20 00:45*	*NWTPH-Dx*	

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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
B17 5.5-7.5 (A0L0287-31)				**Matrix: Soil**		**Batch: 0120557**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 02:03	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/16/20 02:03	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 94 %*		*Limits: 50-150 %*	*1*	*12/16/20 02:03*	*NWTPH-Dx*	
B19 6.5-7 (A0L0287-33)				**Matrix: Soil**		**Batch: 0120557**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 02:23	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/16/20 02:23	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*		*Limits: 50-150 %*	*1*	*12/16/20 02:23*	*NWTPH-Dx*	
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 0120601**		
Diesel	ND	---	220	mg/kg dry	10	12/17/20 01:18	NWTPH-Dx	
Oil	**498**	---	441	mg/kg dry	10	12/17/20 01:18	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 74 %*		*Limits: 50-150 %*	*10*	*12/17/20 01:18*	*NWTPH-Dx*	*S-05*
C002 (A0L0287-43)				**Matrix: Soil**		**Batch: 0120601**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 21:34	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/16/20 21:34	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 78 %*		*Limits: 50-150 %*	*1*	*12/16/20 21:34*	*NWTPH-Dx*	
C003 (A0L0287-44)				**Matrix: Soil**		**Batch: 0120601**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 21:55	NWTPH-Dx	
Oil	**266**	---	50.0	mg/kg dry	1	12/16/20 21:55	NWTPH-Dx	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 71 %*		*Limits: 50-150 %*	*1*	*12/16/20 21:55*	*NWTPH-Dx*	
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120601**		
Diesel	ND	---	929	mg/kg dry	40	12/16/20 22:15	NWTPH-Dx	
Oil	**4680**	---	1860	mg/kg dry	40	12/16/20 22:15	NWTPH-Dx	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: %*		*Limits: 50-150 %*	*40*	*12/16/20 22:15*	*NWTPH-Dx*	*S-01*
C005 (A0L0287-46)				**Matrix: Soil**		**Batch: 0120601**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 22:55	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	12/16/20 22:55	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 51 %*		*Limits: 50-150 %*	*1*	*12/16/20 22:55*	*NWTPH-Dx*	

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Darrell Auvil, Project Manager

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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
C006 (A0L0287-47)				**Matrix: Soil**		**Batch: 0120601**		
Diesel	ND	---	25.0	mg/kg dry	1	12/16/20 23:16	NWTPH-Dx	
Oil	**87.0**	---	50.0	mg/kg dry	1	12/16/20 23:16	NWTPH-Dx	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 66 %*		*Limits: 50-150 %*	*1*	*12/16/20 23:16*	*NWTPH-Dx*	

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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
B1 3-3.5 (A0L0287-01)				**Matrix: Soil**		**Batch: 0120412**		
Gasoline Range Organics	ND	---	6.28	mg/kg dry	50	12/11/20 00:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*		*Limits: 50-150 %*	*1*	*12/11/20 00:05*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*	*1*	*12/11/20 00:05*	*NWTPH-Gx (MS)*	
B4 5-5.5 (A0L0287-04)				**Matrix: Soil**		**Batch: 0120412**		
Gasoline Range Organics	ND	---	6.95	mg/kg dry	50	12/11/20 05:04	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 104 %*		*Limits: 50-150 %*	*1*	*12/11/20 05:04*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*	*1*	*12/11/20 05:04*	*NWTPH-Gx (MS)*	
B5 0.5-1 (A0L0287-05)				**Matrix: Soil**		**Batch: 0120412**		
Gasoline Range Organics	ND	---	6.22	mg/kg dry	50	12/11/20 05:31	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 105 %*		*Limits: 50-150 %*	*1*	*12/11/20 05:31*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*105 %*		*50-150 %*	*1*	*12/11/20 05:31*	*NWTPH-Gx (MS)*	
B6 0.5-1 (A0L0287-07)				**Matrix: Soil**		**Batch: 0120428**		
Gasoline Range Organics	ND	---	11.2	mg/kg dry	50	12/11/20 20:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 106 %*		*Limits: 50-150 %*	*1*	*12/11/20 20:23*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*	*1*	*12/11/20 20:23*	*NWTPH-Gx (MS)*	
B10 2-2.5 (A0L0287-12)				**Matrix: Soil**		**Batch: 0120428**		**V-15**
Gasoline Range Organics	ND	---	6.96	mg/kg dry	50	12/11/20 17:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 107 %*		*Limits: 50-150 %*	*1*	*12/11/20 17:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*103 %*		*50-150 %*	*1*	*12/11/20 17:40*	*NWTPH-Gx (MS)*	
B13 1-2 (A0L0287-13)				**Matrix: Soil**		**Batch: 0120428**		
Gasoline Range Organics	ND	---	6.22	mg/kg dry	50	12/11/20 21:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 103 %*		*Limits: 50-150 %*	*1*	*12/11/20 21:17*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*	*1*	*12/11/20 21:17*	*NWTPH-Gx (MS)*	
B14 0.5-1 (A0L0287-15)				**Matrix: Soil**		**Batch: 0120428**		
Gasoline Range Organics	ND	---	4.65	mg/kg dry	50	12/11/20 22:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 104 %*		*Limits: 50-150 %*	*1*	*12/11/20 22:12*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*	*1*	*12/11/20 22:12*	*NWTPH-Gx (MS)*	
B15 0.5-1 (A0L0287-17)				**Matrix: Soil**		**Batch: 0120456**		

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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
B15 0.5-1 (A0L0287-17)				**Matrix: Soil**		**Batch: 0120456**		
Gasoline Range Organics	ND	---	6.27	mg/kg dry	50	12/12/20 03:10	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 103 %*		*Limits: 50-150 %*	*1*	*12/12/20 03:10*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*103 %*	*50-150 %*	*1*	*12/12/20 03:10*	*NWTPH-Gx (MS)*	
B15 7.5-8.5 (A0L0287-18RE1)				**Matrix: Soil**		**Batch: 0120647**		
Gasoline Range Organics	ND	---	5.88	mg/kg dry	50	12/17/20 19:26	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*12/17/20 19:26*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*12/17/20 19:26*	*NWTPH-Gx (MS)*	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 0120740**		**V-16**
Gasoline Range Organics	ND	---	5.28	mg/kg dry	50	12/20/20 01:36	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*		*Limits: 50-150 %*	*1*	*12/20/20 01:36*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*86 %*	*50-150 %*	*1*	*12/20/20 01:36*	*NWTPH-Gx (MS)*	
B17 0.5-1.5 (A0L0287-30)				**Matrix: Soil**		**Batch: 0120456**		
Gasoline Range Organics	ND	---	5.85	mg/kg dry	50	12/12/20 04:04	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*	*1*	*12/12/20 04:04*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*103 %*	*50-150 %*	*1*	*12/12/20 04:04*	*NWTPH-Gx (MS)*	
B17 5.5-7.5 (A0L0287-31RE1)				**Matrix: Soil**		**Batch: 0120647**		
Gasoline Range Organics	ND	---	6.38	mg/kg dry	50	12/17/20 19:53	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*12/17/20 19:53*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*12/17/20 19:53*	*NWTPH-Gx (MS)*	
B19 6.5-7 (A0L0287-33RE1)				**Matrix: Soil**		**Batch: 0120647**		
Gasoline Range Organics	ND	---	6.26	mg/kg dry	50	12/17/20 20:21	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*		*Limits: 50-150 %*	*1*	*12/17/20 20:21*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*12/17/20 20:21*	*NWTPH-Gx (MS)*	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B1 3-3.5 (A0L0287-01)				**Matrix: Soil**		**Batch: 0120412**		
Acetone	ND	---	1260	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Acrylonitrile	ND	---	314	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Benzene	ND	---	12.6	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Bromobenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Bromochloromethane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Bromodichloromethane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Bromoform	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Bromomethane	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
2-Butanone (MEK)	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
n-Butylbenzene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
sec-Butylbenzene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
tert-Butylbenzene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Carbon disulfide	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Carbon tetrachloride	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Chlorobenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Chloroethane	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Chloroform	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Chloromethane	ND	---	314	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
2-Chlorotoluene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
4-Chlorotoluene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Dibromochloromethane	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	314	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Dibromomethane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2-Dichlorobenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,3-Dichlorobenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,4-Dichlorobenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Dichlorodifluoromethane	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1-Dichloroethane	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1-Dichloroethene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	

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Darrell Auvil, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B1 3-3.5 (A0L0287-01)				**Matrix: Soil**		**Batch: 0120412**		
1,2-Dichloropropane	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,3-Dichloropropane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
2,2-Dichloropropane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1-Dichloropropene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Ethylbenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Hexachlorobutadiene	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
2-Hexanone	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Isopropylbenzene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
4-Isopropyltoluene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Methylene chloride	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	628	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Naphthalene	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
n-Propylbenzene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Styrene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Toluene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	314	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	314	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1,1-Trichloroethane	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,1,2-Trichloroethane	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Trichloroethene (TCE)	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Trichlorofluoromethane	ND	---	126	ug/kg dry	50	12/11/20 00:05	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
Vinyl chloride	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
m,p-Xylene	ND	---	62.8	ug/kg dry	50	12/11/20 00:05	5035A/8260D	
o-Xylene	ND	---	31.4	ug/kg dry	50	12/11/20 00:05	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B1 3-3.5 (A0L0287-01)				**Matrix: Soil**		**Batch: 0120412**		
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:* *80-120 %*	*1*	*12/11/20 00:05*	*5035A/8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*12/11/20 00:05*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*98 %*	*79-120 %*	*1*	*12/11/20 00:05*	*5035A/8260D*	
B4 5-5.5 (A0L0287-04)				**Matrix: Soil**		**Batch: 0120412**		
Acetone	ND	---	1390	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Acrylonitrile	ND	---	348	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Benzene	ND	---	13.9	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Bromobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Bromochloromethane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Bromodichloromethane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Bromoform	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Bromomethane	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
2-Butanone (MEK)	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
n-Butylbenzene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
sec-Butylbenzene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
tert-Butylbenzene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Carbon disulfide	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Carbon tetrachloride	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Chlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Chloroethane	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Chloroform	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Chloromethane	ND	---	348	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
2-Chlorotoluene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
4-Chlorotoluene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Dibromochloromethane	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	348	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Dibromomethane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2-Dichlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,3-Dichlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,4-Dichlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Dichlorodifluoromethane	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1-Dichloroethane	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B4 5-5.5 (A0L0287-04)				**Matrix: Soil**		**Batch: 0120412**		
1,2-Dichloroethane (EDC)	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1-Dichloroethene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2-Dichloropropane	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,3-Dichloropropane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
2,2-Dichloropropane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1-Dichloropropene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Ethylbenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Hexachlorobutadiene	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
2-Hexanone	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Isopropylbenzene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
4-Isopropyltoluene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Methylene chloride	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	695	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Naphthalene	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
n-Propylbenzene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Styrene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Toluene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	348	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	348	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1,1-Trichloroethane	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,1,2-Trichloroethane	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Trichloroethene (TCE)	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Trichlorofluoromethane	ND	---	139	ug/kg dry	50	12/11/20 05:04	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B4 5-5.5 (A0L0287-04)				**Matrix: Soil**		**Batch: 0120412**		
1,3,5-Trimethylbenzene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Vinyl chloride	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
m,p-Xylene	ND	---	69.5	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
o-Xylene	ND	---	34.8	ug/kg dry	50	12/11/20 05:04	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*12/11/20 05:04*	*5035A/8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*12/11/20 05:04*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*12/11/20 05:04*	*5035A/8260D*	
B5 0.5-1 (A0L0287-05)				**Matrix: Soil**		**Batch: 0120412**		
Acetone	ND	---	1240	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Acrylonitrile	ND	---	311	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Benzene	ND	---	12.4	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Bromobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Bromochloromethane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Bromodichloromethane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Bromoform	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Bromomethane	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
2-Butanone (MEK)	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
n-Butylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
sec-Butylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
tert-Butylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Carbon disulfide	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Carbon tetrachloride	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Chlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Chloroethane	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Chloroform	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Chloromethane	ND	---	311	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
2-Chlorotoluene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
4-Chlorotoluene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Dibromochloromethane	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	311	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Dibromomethane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2-Dichlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	

Apex Laboratories

Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B5 0.5-1 (A0L0287-05)				**Matrix: Soil**		**Batch: 0120412**		
1,3-Dichlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,4-Dichlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Dichlorodifluoromethane	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1-Dichloroethane	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1-Dichloroethene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2-Dichloropropane	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,3-Dichloropropane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
2,2-Dichloropropane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1-Dichloropropene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Ethylbenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Hexachlorobutadiene	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
2-Hexanone	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Isopropylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
4-Isopropyltoluene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Methylene chloride	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	622	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Naphthalene	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
n-Propylbenzene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Styrene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Toluene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	311	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	311	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1,1-Trichloroethane	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,1,2-Trichloroethane	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B5 0.5-1 (A0L0287-05)				**Matrix: Soil**		**Batch: 0120412**		
Trichloroethene (TCE)	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Trichlorofluoromethane	ND	---	124	ug/kg dry	50	12/11/20 05:31	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Vinyl chloride	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
m,p-Xylene	ND	---	62.2	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
o-Xylene	ND	---	31.1	ug/kg dry	50	12/11/20 05:31	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*12/11/20 05:31*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*12/11/20 05:31*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*12/11/20 05:31*	*5035A/8260D*	
B6 0.5-1 (A0L0287-07)				**Matrix: Soil**		**Batch: 0120428**		
Acetone	ND	---	2230	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Acrylonitrile	ND	---	558	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Benzene	ND	---	22.3	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Bromobenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Bromochloromethane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Bromodichloromethane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Bromoform	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Bromomethane	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
2-Butanone (MEK)	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
n-Butylbenzene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
sec-Butylbenzene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
tert-Butylbenzene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Carbon disulfide	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Carbon tetrachloride	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Chlorobenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Chloroethane	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	Q-30
Chloroform	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Chloromethane	ND	---	558	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
2-Chlorotoluene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
4-Chlorotoluene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Dibromochloromethane	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B6 0.5-1 (A0L0287-07)				**Matrix: Soil**		**Batch: 0120428**		
1,2-Dibromo-3-chloropropane	ND	---	558	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Dibromomethane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,2-Dichlorobenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,3-Dichlorobenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,4-Dichlorobenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Dichlorodifluoromethane	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1-Dichloroethane	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1-Dichloroethene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,2-Dichloropropane	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,3-Dichloropropane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
2,2-Dichloropropane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1-Dichloropropene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Ethylbenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Hexachlorobutadiene	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
2-Hexanone	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Isopropylbenzene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
4-Isopropyltoluene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Methylene chloride	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	1120	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Naphthalene	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
n-Propylbenzene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Styrene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Toluene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B6 0.5-1 (A0L0287-07)				**Matrix: Soil**		**Batch: 0120428**		
1,2,3-Trichlorobenzene	ND	---	558	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	558	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1,1-Trichloroethane	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,1,2-Trichloroethane	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Trichloroethene (TCE)	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Trichlorofluoromethane	ND	---	223	ug/kg dry	50	12/11/20 20:23	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Vinyl chloride	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
m,p-Xylene	ND	---	112	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
o-Xylene	ND	---	55.8	ug/kg dry	50	12/11/20 20:23	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*12/11/20 20:23*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*12/11/20 20:23*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*12/11/20 20:23*	*5035A/8260D*	
B10 2-2.5 (A0L0287-12)				**Matrix: Soil**		**Batch: 0120428**		**V-15**
Acetone	ND	---	1390	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Acrylonitrile	ND	---	348	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Benzene	ND	---	13.9	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Bromobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Bromochloromethane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Bromodichloromethane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Bromoform	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Bromomethane	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
2-Butanone (MEK)	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
n-Butylbenzene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
sec-Butylbenzene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
tert-Butylbenzene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Carbon disulfide	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Carbon tetrachloride	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Chlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Chloroethane	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	Q-30
Chloroform	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B10 2-2.5 (A0L0287-12)				**Matrix: Soil**		**Batch: 0120428**		**V-15**
Chloromethane	ND	---	348	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
2-Chlorotoluene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
4-Chlorotoluene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Dibromochloromethane	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	348	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Dibromomethane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2-Dichlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,3-Dichlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,4-Dichlorobenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Dichlorodifluoromethane	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,1-Dichloroethane	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,1-Dichloroethene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2-Dichloropropane	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,3-Dichloropropane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
2,2-Dichloropropane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,1-Dichloropropene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Ethylbenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Hexachlorobutadiene	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
2-Hexanone	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Isopropylbenzene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
4-Isopropyltoluene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Methylene chloride	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	696	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Naphthalene	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
n-Propylbenzene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Styrene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B10 2-2.5 (A0L0287-12)				**Matrix: Soil**		**Batch: 0120428**		**V-15**
1,1,1,2-Tetrachloroethane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Toluene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	348	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	348	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,1,1-Trichloroethane	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,1,2-Trichloroethane	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Trichloroethene (TCE)	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Trichlorofluoromethane	ND	---	139	ug/kg dry	50	12/11/20 17:40	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Vinyl chloride	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
m,p-Xylene	ND	---	69.6	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
o-Xylene	ND	---	34.8	ug/kg dry	50	12/11/20 17:40	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*12/11/20 17:40*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*12/11/20 17:40*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*	*1*	*12/11/20 17:40*	*5035A/8260D*	
B13 1-2 (A0L0287-13)				**Matrix: Soil**		**Batch: 0120428**		
Acetone	ND	---	1240	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Acrylonitrile	ND	---	311	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Benzene	ND	---	12.4	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Bromobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Bromochloromethane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Bromodichloromethane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Bromoform	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Bromomethane	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
2-Butanone (MEK)	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
n-Butylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
sec-Butylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
tert-Butylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Carbon disulfide	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B13 1-2 (A0L0287-13)				**Matrix: Soil**		**Batch: 0120428**		
Carbon tetrachloride	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Chlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Chloroethane	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	Q-30
Chloroform	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Chloromethane	ND	---	311	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
2-Chlorotoluene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
4-Chlorotoluene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Dibromochloromethane	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	311	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Dibromomethane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2-Dichlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,3-Dichlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,4-Dichlorobenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Dichlorodifluoromethane	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1-Dichloroethane	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1-Dichloroethene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2-Dichloropropane	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,3-Dichloropropane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
2,2-Dichloropropane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1-Dichloropropene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Ethylbenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Hexachlorobutadiene	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
2-Hexanone	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Isopropylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
4-Isopropyltoluene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Methylene chloride	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	622	ug/kg dry	50	12/11/20 21:17	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B13 1-2 (A0L0287-13)				**Matrix: Soil**		**Batch: 0120428**		
Methyl tert-butyl ether (MTBE)	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Naphthalene	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
n-Propylbenzene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Styrene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Toluene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	311	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	311	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1,1-Trichloroethane	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,1,2-Trichloroethane	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Trichloroethene (TCE)	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Trichlorofluoromethane	ND	---	124	ug/kg dry	50	12/11/20 21:17	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Vinyl chloride	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
m,p-Xylene	ND	---	62.2	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
o-Xylene	ND	---	31.1	ug/kg dry	50	12/11/20 21:17	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*12/11/20 21:17*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*12/11/20 21:17*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*12/11/20 21:17*	*5035A/8260D*	
B14 0.5-1 (A0L0287-15)				**Matrix: Soil**		**Batch: 0120428**		
Acetone	ND	---	931	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Acrylonitrile	ND	---	233	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Benzene	ND	---	9.31	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Bromobenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Bromochloromethane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Bromodichloromethane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Bromoform	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Bromomethane	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
2-Butanone (MEK)	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	

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Darrell Auvil, Project Manager

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6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B14 0.5-1 (A0L0287-15)				**Matrix: Soil**		**Batch: 0120428**		
n-Butylbenzene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
sec-Butylbenzene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
tert-Butylbenzene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Carbon disulfide	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Carbon tetrachloride	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Chlorobenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Chloroethane	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	Q-30
Chloroform	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Chloromethane	ND	---	233	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
2-Chlorotoluene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
4-Chlorotoluene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Dibromochloromethane	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	233	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Dibromomethane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2-Dichlorobenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,3-Dichlorobenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,4-Dichlorobenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Dichlorodifluoromethane	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1-Dichloroethane	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1-Dichloroethene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2-Dichloropropane	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,3-Dichloropropane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
2,2-Dichloropropane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1-Dichloropropene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Ethylbenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Hexachlorobutadiene	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
2-Hexanone	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B14 0.5-1 (A0L0287-15)				**Matrix: Soil**		**Batch: 0120428**		
Isopropylbenzene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
4-Isopropyltoluene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Methylene chloride	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	465	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Naphthalene	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
n-Propylbenzene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Styrene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Toluene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	233	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	233	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1,1-Trichloroethane	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,1,2-Trichloroethane	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Trichloroethene (TCE)	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Trichlorofluoromethane	ND	---	93.1	ug/kg dry	50	12/11/20 22:12	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Vinyl chloride	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
m,p-Xylene	ND	---	46.5	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
o-Xylene	ND	---	23.3	ug/kg dry	50	12/11/20 22:12	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*12/11/20 22:12*	*5035A/8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*12/11/20 22:12*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*	*1*	*12/11/20 22:12*	*5035A/8260D*	
B15 0.5-1 (A0L0287-17)				**Matrix: Soil**		**Batch: 0120456**		
Acetone	ND	---	1250	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Acrylonitrile	ND	---	313	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Benzene	ND	---	12.5	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Bromobenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Bromochloromethane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B15 0.5-1 (A0L0287-17)				**Matrix: Soil**		**Batch: 0120456**		
Bromodichloromethane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Bromoform	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Bromomethane	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
2-Butanone (MEK)	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
n-Butylbenzene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
sec-Butylbenzene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
tert-Butylbenzene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Carbon disulfide	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Carbon tetrachloride	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Chlorobenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Chloroethane	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	Q-30
Chloroform	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Chloromethane	ND	---	313	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
2-Chlorotoluene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
4-Chlorotoluene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Dibromochloromethane	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	313	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Dibromomethane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2-Dichlorobenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,3-Dichlorobenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,4-Dichlorobenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Dichlorodifluoromethane	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1-Dichloroethane	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1-Dichloroethene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2-Dichloropropane	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,3-Dichloropropane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
2,2-Dichloropropane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1-Dichloropropene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B15 0.5-1 (A0L0287-17)				**Matrix: Soil**		**Batch: 0120456**		
trans-1,3-Dichloropropene	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Ethylbenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Hexachlorobutadiene	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
2-Hexanone	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Isopropylbenzene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
4-Isopropyltoluene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Methylene chloride	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	627	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Naphthalene	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
n-Propylbenzene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Styrene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Toluene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	313	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	313	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1,1-Trichloroethane	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,1,2-Trichloroethane	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Trichloroethene (TCE)	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Trichlorofluoromethane	ND	---	125	ug/kg dry	50	12/12/20 03:10	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Vinyl chloride	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
m,p-Xylene	ND	---	62.7	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
o-Xylene	ND	---	31.3	ug/kg dry	50	12/12/20 03:10	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*	*1*	*12/12/20 03:10*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*		*80-120 %*	*1*	*12/12/20 03:10*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*		*79-120 %*	*1*	*12/12/20 03:10*	*5035A/8260D*	
B15 7.5-8.5 (A0L0287-18RE1)				**Matrix: Soil**		**Batch: 0120647**		
Acetone	ND	---	1180	ug/kg dry	50	12/17/20 19:26	5035A/8260D	

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B15 7.5-8.5 (A0L0287-18RE1)				**Matrix: Soil**		**Batch: 0120647**		
Acrylonitrile	ND	---	294	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Benzene	ND	---	11.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Bromobenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Bromochloromethane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Bromodichloromethane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Bromoform	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Bromomethane	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
2-Butanone (MEK)	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
n-Butylbenzene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
sec-Butylbenzene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
tert-Butylbenzene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Carbon disulfide	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Carbon tetrachloride	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Chlorobenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Chloroethane	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Chloroform	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Chloromethane	ND	---	294	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
2-Chlorotoluene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
4-Chlorotoluene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Dibromochloromethane	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	294	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Dibromomethane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2-Dichlorobenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,3-Dichlorobenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,4-Dichlorobenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Dichlorodifluoromethane	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1-Dichloroethane	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1-Dichloroethene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2-Dichloropropane	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B15 7.5-8.5 (A0L0287-18RE1)				**Matrix: Soil**		**Batch: 0120647**		
1,3-Dichloropropane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
2,2-Dichloropropane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1-Dichloropropene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Ethylbenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Hexachlorobutadiene	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
2-Hexanone	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Isopropylbenzene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
4-Isopropyltoluene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Methylene chloride	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	588	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Naphthalene	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
n-Propylbenzene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Styrene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Toluene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	294	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	294	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1,1-Trichloroethane	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,1,2-Trichloroethane	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Trichloroethene (TCE)	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Trichlorofluoromethane	ND	---	118	ug/kg dry	50	12/17/20 19:26	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Vinyl chloride	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
m,p-Xylene	ND	---	58.8	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
o-Xylene	ND	---	29.4	ug/kg dry	50	12/17/20 19:26	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*		*Limits: 80-120 %*	*1*	*12/17/20 19:26*	*5035A/8260D*	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B15 7.5-8.5 (A0L0287-18RE1)				**Matrix: Soil**		**Batch: 0120647**		
Surrogate: Toluene-d8 (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*	*1*	*12/17/20 19:26*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*79-120 %*	*1*	*12/17/20 19:26*	*5035A/8260D*	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 0120740**		**V-16**
Acetone	ND	---	1060	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Acrylonitrile	ND	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Benzene	ND	---	10.6	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Bromobenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Bromochloromethane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Bromodichloromethane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Bromoform	ND	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Bromomethane	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
2-Butanone (MEK)	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
n-Butylbenzene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
sec-Butylbenzene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
tert-Butylbenzene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Carbon disulfide	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Carbon tetrachloride	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Chlorobenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Chloroethane	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Chloroform	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Chloromethane	ND	---	264	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
2-Chlorotoluene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
4-Chlorotoluene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Dibromochloromethane	ND	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	264	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Dibromomethane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2-Dichlorobenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,3-Dichlorobenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,4-Dichlorobenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Dichlorodifluoromethane	ND	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,1-Dichloroethane	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 0120740**		**V-16**
1,1-Dichloroethene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2-Dichloropropane	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,3-Dichloropropane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
2,2-Dichloropropane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,1-Dichloropropene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Ethylbenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Hexachlorobutadiene	ND	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
2-Hexanone	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Isopropylbenzene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
4-Isopropyltoluene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Methylene chloride	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	528	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Naphthalene	**439**	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
n-Propylbenzene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Styrene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Toluene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	264	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	264	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,1,1-Trichloroethane	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,1,2-Trichloroethane	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Trichloroethene (TCE)	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Trichlorofluoromethane	ND	---	106	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2,3-Trichloropropane	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 0120740**		**V-16**
Vinyl chloride	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
m,p-Xylene	ND	---	52.8	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
o-Xylene	ND	---	26.4	ug/kg dry	50	12/20/20 01:36	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*94 %*	*Limits: 80-120 %*	*1*	*12/20/20 01:36*	*5035A/8260D*	
Toluene-d8 (Surr)			*95 %*	*80-120 %*	*1*	*12/20/20 01:36*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*	*1*	*12/20/20 01:36*	*5035A/8260D*	
B17 0.5-1.5 (A0L0287-30)				**Matrix: Soil**		**Batch: 0120456**		
Acetone	ND	---	1170	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Acrylonitrile	ND	---	292	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Benzene	ND	---	11.7	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Bromobenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Bromochloromethane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Bromodichloromethane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Bromoform	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Bromomethane	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
2-Butanone (MEK)	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
n-Butylbenzene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
sec-Butylbenzene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
tert-Butylbenzene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Carbon disulfide	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Carbon tetrachloride	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Chlorobenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Chloroethane	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	Q-30
Chloroform	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Chloromethane	ND	---	292	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
2-Chlorotoluene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
4-Chlorotoluene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Dibromochloromethane	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	292	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Dibromomethane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2-Dichlorobenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,3-Dichlorobenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B17 0.5-1.5 (A0L0287-30)				**Matrix: Soil**		**Batch: 0120456**		
1,4-Dichlorobenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Dichlorodifluoromethane	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1-Dichloroethane	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1-Dichloroethene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2-Dichloropropane	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,3-Dichloropropane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
2,2-Dichloropropane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1-Dichloropropene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Ethylbenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Hexachlorobutadiene	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
2-Hexanone	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Isopropylbenzene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
4-Isopropyltoluene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Methylene chloride	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	585	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Naphthalene	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
n-Propylbenzene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Styrene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Toluene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	292	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	292	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1,1-Trichloroethane	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,1,2-Trichloroethane	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Trichloroethene (TCE)	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B17 0.5-1.5 (A0L0287-30)				**Matrix: Soil**		**Batch: 0120456**		
Trichlorofluoromethane	ND	---	117	ug/kg dry	50	12/12/20 04:04	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Vinyl chloride	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
m,p-Xylene	ND	---	58.5	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
o-Xylene	ND	---	29.2	ug/kg dry	50	12/12/20 04:04	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*12/12/20 04:04*	*5035A/8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*12/12/20 04:04*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*12/12/20 04:04*	*5035A/8260D*	
B17 5.5-7.5 (A0L0287-31RE1)				**Matrix: Soil**		**Batch: 0120647**		
Acetone	ND	---	1280	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Acrylonitrile	ND	---	319	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Benzene	ND	---	12.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Bromobenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Bromochloromethane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Bromodichloromethane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Bromoform	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Bromomethane	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
2-Butanone (MEK)	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
n-Butylbenzene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
sec-Butylbenzene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
tert-Butylbenzene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Carbon disulfide	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Carbon tetrachloride	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Chlorobenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Chloroethane	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Chloroform	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Chloromethane	ND	---	319	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
2-Chlorotoluene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
4-Chlorotoluene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Dibromochloromethane	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	319	ug/kg dry	50	12/17/20 19:53	5035A/8260D	

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Darrell Auvil, Project Manager

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B17 5.5-7.5 (A0L0287-31RE1)				**Matrix: Soil**		**Batch: 0120647**		
1,2-Dibromoethane (EDB)	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Dibromomethane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,2-Dichlorobenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,3-Dichlorobenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,4-Dichlorobenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Dichlorodifluoromethane	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1-Dichloroethane	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1-Dichloroethene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,2-Dichloropropane	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,3-Dichloropropane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
2,2-Dichloropropane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1-Dichloropropene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Ethylbenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Hexachlorobutadiene	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
2-Hexanone	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Isopropylbenzene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
4-Isopropyltoluene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Methylene chloride	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	638	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Naphthalene	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
n-Propylbenzene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Styrene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Toluene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	319	ug/kg dry	50	12/17/20 19:53	5035A/8260D	

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Darrell Auvil, Project Manager

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B17 5.5-7.5 (A0L0287-31RE1)				**Matrix: Soil**		**Batch: 0120647**		
1,2,4-Trichlorobenzene	ND	---	319	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1,1-Trichloroethane	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,1,2-Trichloroethane	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Trichloroethene (TCE)	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Trichlorofluoromethane	ND	---	128	ug/kg dry	50	12/17/20 19:53	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Vinyl chloride	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
m,p-Xylene	ND	---	63.8	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
o-Xylene	ND	---	31.9	ug/kg dry	50	12/17/20 19:53	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*110 %*	*Limits: 80-120 %*	*1*	*12/17/20 19:53*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*12/17/20 19:53*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*12/17/20 19:53*	*5035A/8260D*	
B19 6.5-7 (A0L0287-33RE1)				**Matrix: Soil**		**Batch: 0120647**		
Acetone	ND	---	1250	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Acrylonitrile	ND	---	313	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Benzene	ND	---	12.5	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Bromobenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Bromochloromethane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Bromodichloromethane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Bromoform	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Bromomethane	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
2-Butanone (MEK)	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
n-Butylbenzene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
sec-Butylbenzene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
tert-Butylbenzene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Carbon disulfide	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Carbon tetrachloride	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Chlorobenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Chloroethane	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Chloroform	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Chloromethane	ND	---	313	ug/kg dry	50	12/17/20 20:21	5035A/8260D	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B19 6.5-7 (A0L0287-33RE1)				**Matrix: Soil**		**Batch: 0120647**		
2-Chlorotoluene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
4-Chlorotoluene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Dibromochloromethane	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	313	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Dibromomethane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2-Dichlorobenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,3-Dichlorobenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,4-Dichlorobenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Dichlorodifluoromethane	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,1-Dichloroethane	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,1-Dichloroethene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2-Dichloropropane	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,3-Dichloropropane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
2,2-Dichloropropane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,1-Dichloropropene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Ethylbenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Hexachlorobutadiene	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
2-Hexanone	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Isopropylbenzene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
4-Isopropyltoluene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Methylene chloride	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	626	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Naphthalene	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
n-Propylbenzene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Styrene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	

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Darrell Auvil, Project Manager

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6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B19 6.5-7 (A0L0287-33RE1)				**Matrix: Soil**		**Batch: 0120647**		
1,1,2,2-Tetrachloroethane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Toluene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	313	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	313	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,1,1-Trichloroethane	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,1,2-Trichloroethane	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Trichloroethene (TCE)	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Trichlorofluoromethane	ND	---	125	ug/kg dry	50	12/17/20 20:21	5035A/8260D	EST
1,2,3-Trichloropropane	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Vinyl chloride	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
m,p-Xylene	ND	---	62.6	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
o-Xylene	ND	---	31.3	ug/kg dry	50	12/17/20 20:21	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*109 %*	*Limits: 80-120 %*	*1*	*12/17/20 20:21*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*12/17/20 20:21*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*12/17/20 20:21*	*5035A/8260D*	

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Darrell Auvil, Project Manager

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 0120889**		**C-07**
Aroclor 1016	ND	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	
Aroclor 1221	ND	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	
Aroclor 1232	ND	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	
Aroclor 1242	ND	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	
Aroclor 1248	ND	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	
Aroclor 1254	**17.2**	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	**P-12**
Aroclor 1260	**13.2**	---	11.5	ug/kg dry	1	12/29/20 11:07	EPA 8082A	**P-12**
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 102 %*		*Limits: 60-125 %*	*1*	*12/29/20 11:07*	*EPA 8082A*	
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120889**		**C-07**
Aroclor 1016	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Aroclor 1221	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Aroclor 1232	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Aroclor 1242	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Aroclor 1248	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Aroclor 1254	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Aroclor 1260	ND	---	11.6	ug/kg dry	1	12/29/20 12:18	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 78 %*		*Limits: 60-125 %*	*1*	*12/29/20 12:18*	*EPA 8082A*	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B4 2-2.3 (A0L0287-03RE1)				**Matrix: Soil**		**Batch: 0120466**		**C-05**
Aldrin	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
alpha-BHC	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
beta-BHC	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
delta-BHC	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
gamma-BHC (Lindane)	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
cis-Chlordane	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
trans-Chlordane	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
4,4'-DDD	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
4,4'-DDE	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
4,4'-DDT	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Dieldrin	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Endosulfan I	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Endosulfan II	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Endosulfan sulfate	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Endrin	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Endrin Aldehyde	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Endrin ketone	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Heptachlor	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Heptachlor epoxide	ND	---	2.33	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Methoxychlor	ND	---	7.00	ug/kg dry	1	12/14/20 16:26	EPA 8081B	Q-31
Chlordane (Technical)	ND	---	70.0	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Toxaphene (Total)	ND	---	70.0	ug/kg dry	1	12/14/20 16:26	EPA 8081B	
Surrogate: 2,4,5,6-TCMX (Surr)		*Recovery:*	*47 %*	*Limits: 42-129 %*	*1*	*12/14/20 16:26*	*EPA 8081B*	
Decachlorobiphenyl (Surr)			*78 %*	*55-130 %*	*1*	*12/14/20 16:26*	*EPA 8081B*	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 0120742**		
Acenaphthene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Acenaphthylene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Anthracene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benz(a)anthracene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benzo(a)pyrene	**664**	---	466	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benzo(b)fluoranthene	**755**	---	466	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benzo(k)fluoranthene	ND	---	466	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benzo(g,h,i)perylene	**583**	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Chrysene	**329**	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Fluoranthene	**392**	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Fluorene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**513**	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1-Methylnaphthalene	ND	---	621	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2-Methylnaphthalene	ND	---	621	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Naphthalene	ND	---	621	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Phenanthrene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Pyrene	**396**	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Carbazole	ND	---	466	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Dibenzofuran	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2-Chlorophenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4-Chloro-3-methylphenol	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,4-Dichlorophenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,4-Dimethylphenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,4-Dinitrophenol	ND	---	7770	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	---	7770	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2-Methylphenol	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
3+4-Methylphenol(s)	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2-Nitrophenol	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4-Nitrophenol	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Phenol	ND	---	621	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 0120742**		
2,3,5,6-Tetrachlorophenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,4,5-Trichlorophenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Nitrobenzene	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,4,6-Trichlorophenol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	---	4660	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Butyl benzyl phthalate	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Diethylphthalate	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Dimethylphthalate	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Di-n-butylphthalate	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Di-n-octyl phthalate	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
N-Nitrosodimethylamine	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
N-Nitrosodiphenylamine	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Hexachlorobenzene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Hexachlorobutadiene	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Hexachlorocyclopentadiene	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Hexachloroethane	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2-Chloronaphthalene	ND	---	311	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1,2,4-Trichlorobenzene	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4-Bromophenyl phenyl ether	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Aniline	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4-Chloroaniline	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2-Nitroaniline	ND	---	6210	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
3-Nitroaniline	ND	---	6210	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
4-Nitroaniline	ND	---	6210	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,4-Dinitrotoluene	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
2,6-Dinitrotoluene	ND	---	3110	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benzoic acid	ND	---	38800	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Benzyl alcohol	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 0120742**		
Isophorone	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Azobenzene (1,2-DPH)	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	---	7770	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
3,3'-Dichlorobenzidine	ND	---	6210	ug/kg dry	100	12/22/20 15:45	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	---	7770	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1,3-Dinitrobenzene	ND	---	7770	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1,4-Dinitrobenzene	ND	---	7770	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Pyridine	ND	---	1550	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1,2-Dichlorobenzene	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1,3-Dichlorobenzene	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
1,4-Dichlorobenzene	ND	---	777	ug/kg dry	100	12/22/20 15:45	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*46 %*	*Limits: 37-122 %*	*100*	*12/22/20 15:45*	*EPA 8270E*	*S-05*
2-Fluorobiphenyl (Surr)			*58 %*	*44-120 %*	*100*	*12/22/20 15:45*	*EPA 8270E*	*S-05*
Phenol-d6 (Surr)			*48 %*	*33-122 %*	*100*	*12/22/20 15:45*	*EPA 8270E*	*S-05*
p-Terphenyl-d14 (Surr)			*59 %*	*54-127 %*	*100*	*12/22/20 15:45*	*EPA 8270E*	*S-05*
2-Fluorophenol (Surr)			*46 %*	*35-120 %*	*100*	*12/22/20 15:45*	*EPA 8270E*	*S-05*
2,4,6-Tribromophenol (Surr)			*161 %*	*39-132 %*	*100*	*12/22/20 15:45*	*EPA 8270E*	*S-05*
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120742**		
Acenaphthene	**6370**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Acenaphthylene	**5490**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Anthracene	**13700**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Benz(a)anthracene	**36800**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Benzo(a)pyrene	**46800**	---	920	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Benzo(b)fluoranthene	**43600**	---	920	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Benzo(k)fluoranthene	**17500**	---	920	ug/kg dry	200	12/22/20 16:21	EPA 8270E	**M-05**
Benzo(g,h,i)perylene	**27600**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Chrysene	**41800**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Dibenz(a,h)anthracene	**4880**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Fluoranthene	**80200**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Fluorene	**4320**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**26300**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1-Methylnaphthalene	ND	---	1230	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2-Methylnaphthalene	**1430**	---	1230	ug/kg dry	200	12/22/20 16:21	EPA 8270E	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120742**		
Naphthalene	**3310**	---	1230	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Phenanthrene	**56400**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Pyrene	**93000**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Carbazole	**3240**	---	920	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Dibenzofuran	**1960**	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2-Chlorophenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4-Chloro-3-methylphenol	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,4-Dichlorophenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,4-Dimethylphenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,4-Dinitrophenol	ND	---	15300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	---	15300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2-Methylphenol	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
3+4-Methylphenol(s)	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2-Nitrophenol	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4-Nitrophenol	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Phenol	ND	---	1230	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,4,5-Trichlorophenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Nitrobenzene	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,4,6-Trichlorophenol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	---	9200	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Butyl benzyl phthalate	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Diethylphthalate	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Dimethylphthalate	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Di-n-butylphthalate	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Di-n-octyl phthalate	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
N-Nitrosodimethylamine	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
N-Nitrosodiphenylamine	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120742**		
2,2'-Oxybis(1-Chloropropane)	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Hexachlorobenzene	ND	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Hexachlorobutadiene	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Hexachlorocyclopentadiene	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Hexachloroethane	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2-Chloronaphthalene	ND	---	614	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1,2,4-Trichlorobenzene	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4-Bromophenyl phenyl ether	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Aniline	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4-Chloroaniline	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2-Nitroaniline	ND	---	12300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
3-Nitroaniline	ND	---	12300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
4-Nitroaniline	ND	---	12300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,4-Dinitrotoluene	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
2,6-Dinitrotoluene	ND	---	6140	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Benzoic acid	ND	---	76600	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Benzyl alcohol	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Isophorone	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Azobenzene (1,2-DPH)	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	---	15300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
3,3'-Dichlorobenzidine	ND	---	12300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	---	15300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1,3-Dinitrobenzene	ND	---	15300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1,4-Dinitrobenzene	ND	---	15300	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Pyridine	ND	---	3060	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1,2-Dichlorobenzene	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1,3-Dichlorobenzene	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
1,4-Dichlorobenzene	ND	---	1530	ug/kg dry	200	12/22/20 16:21	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*64 %*	*Limits: 37-122 %*	*200*	*12/22/20 16:21*	*EPA 8270E*	*S-05*
2-Fluorobiphenyl (Surr)			*75 %*	*44-120 %*	*200*	*12/22/20 16:21*	*EPA 8270E*	*S-05*
Phenol-d6 (Surr)			*67 %*	*33-122 %*	*200*	*12/22/20 16:21*	*EPA 8270E*	*S-05*
p-Terphenyl-d14 (Surr)			*102 %*	*54-127 %*	*200*	*12/22/20 16:21*	*EPA 8270E*	*S-05*
2-Fluorophenol (Surr)			*59 %*	*35-120 %*	*200*	*12/22/20 16:21*	*EPA 8270E*	*S-05*

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120742**		
Surrogate: 2,4,6-Tribromophenol (Surr)		*Recovery: 298 %*		*Limits: 39-132 %*	*200*	*12/22/20 16:21*	*EPA 8270E*	*S-05*

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B10 1-2 (A0L0287-11)				**Matrix: Soil**				
Batch: 0120536								
Arsenic	**4.63**	---	1.14	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
Barium	**238**	---	1.14	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
Cadmium	**3.39**	---	0.228	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
Chromium	**17.8**	---	1.14	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
Mercury	**0.810**	---	0.0910	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
Selenium	ND	---	1.14	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
Silver	**0.433**	---	0.228	mg/kg dry	10	12/16/20 18:16	EPA 6020B	
B10 1-2 (A0L0287-11RE1)				**Matrix: Soil**				
Batch: 0120536								
Lead	**717**	---	1.14	mg/kg dry	50	12/17/20 18:58	EPA 6020B	
B10 2-2.5 (A0L0287-12)				**Matrix: Soil**				
Batch: 1012667								
Lead	**10.9**	---	0.261	mg/kg dry	10	01/08/21 14:54	EPA 6020B	
B13 8.5-9 (A0L0287-14)				**Matrix: Soil**				
Batch: 1012667								
Lead	**8.36**	---	0.241	mg/kg dry	10	01/08/21 14:59	EPA 6020B	
B15 7.5-8.5 (A0L0287-18)				**Matrix: Soil**				
Batch: 0120478								
Arsenic	**5.63**	---	1.27	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Barium	**172**	---	1.27	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Cadmium	ND	---	0.254	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Chromium	**20.5**	---	1.27	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Lead	**48.4**	---	0.254	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Mercury	ND	---	0.102	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Selenium	ND	---	1.27	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
Silver	ND	---	0.254	mg/kg dry	10	12/16/20 17:13	EPA 6020B	
B16 5.5-6 (A0L0287-20)				**Matrix: Soil**				
Batch: 0120478								
Arsenic	**8.56**	---	1.23	mg/kg dry	10	12/16/20 17:18	EPA 6020B	

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B16 5.5-6 (A0L0287-20)				**Matrix: Soil**				
Barium	**228**	---	1.23	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
Cadmium	**0.464**	---	0.245	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
Chromium	**25.0**	---	1.23	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
Lead	**62.5**	---	0.245	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
Mercury	ND	---	0.0980	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
Selenium	ND	---	1.23	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
Silver	ND	---	0.245	mg/kg dry	10	12/16/20 17:18	EPA 6020B	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**3.97**	---	1.09	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Barium	**246**	---	1.09	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Cadmium	**0.887**	---	0.217	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Chromium	**18.7**	---	1.09	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Lead	**227**	---	0.217	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Mercury	**0.191**	---	0.0868	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Selenium	ND	---	1.09	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
Silver	ND	---	0.217	mg/kg dry	10	12/22/20 15:43	EPA 6020B	
B17 5.5-7.5 (A0L0287-31)				**Matrix: Soil**				
Batch: 0120478								
Arsenic	**7.56**	---	1.20	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Barium	**315**	---	1.20	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Cadmium	**0.637**	---	0.241	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Chromium	**23.2**	---	1.20	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Lead	**308**	---	0.241	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Mercury	ND	---	0.0963	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Selenium	ND	---	1.20	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
Silver	ND	---	0.241	mg/kg dry	10	12/16/20 17:23	EPA 6020B	
B17 11.5-12.5 (A0L0287-32)				**Matrix: Soil**				
Batch: 1012667								
Lead	**8.72**	---	0.257	mg/kg dry	10	01/08/21 15:04	EPA 6020B	

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B19 6.5-7 (A0L0287-33)				**Matrix: Soil**				
Batch: 0120478								
Arsenic	**7.83**	---	1.30	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Barium	**228**	---	1.30	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Cadmium	**0.310**	---	0.259	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Chromium	**24.0**	---	1.30	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Lead	**102**	---	0.259	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Mercury	ND	---	0.104	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Selenium	ND	---	1.30	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
Silver	ND	---	0.259	mg/kg dry	10	12/16/20 17:28	EPA 6020B	
B19 12-13 (A0L0287-34)				**Matrix: Soil**				
Batch: 1012667								
Lead	**9.29**	---	0.241	mg/kg dry	10	01/08/21 15:10	EPA 6020B	
C001 (A0L0287-42)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**13.8**	---	1.20	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
Barium	**738**	---	1.20	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
Cadmium	**0.871**	---	0.239	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
Chromium	**21.0**	---	1.20	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
Mercury	**0.175**	---	0.0957	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
Selenium	ND	---	1.20	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
Silver	ND	---	0.239	mg/kg dry	10	12/22/20 15:47	EPA 6020B	
C001 (A0L0287-42RE1)				**Matrix: Soil**				
Batch: 0120759								
Lead	**1720**	---	1.20	mg/kg dry	50	12/22/20 20:23	EPA 6020B	
C002 (A0L0287-43)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**25.7**	---	1.20	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
Barium	**180**	---	1.20	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
Cadmium	**0.284**	---	0.241	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
Chromium	**18.3**	---	1.20	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
Lead	**98.8**	---	0.241	mg/kg dry	10	12/22/20 15:52	EPA 6020B	

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C002 (A0L0287-43)				**Matrix: Soil**				
Mercury	**0.119**	---	0.0962	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
Selenium	ND	---	1.20	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
Silver	ND	---	0.241	mg/kg dry	10	12/22/20 15:52	EPA 6020B	
C003 (A0L0287-44)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**6.37**	---	1.37	mg/kg dry	10	12/22/20 15:57	EPA 6020B	
Barium	**141**	---	1.37	mg/kg dry	10	12/22/20 15:57	EPA 6020B	**Q-42**
Cadmium	**0.542**	---	0.274	mg/kg dry	10	12/22/20 15:57	EPA 6020B	
Chromium	**16.1**	---	1.37	mg/kg dry	10	12/22/20 15:57	EPA 6020B	
Lead	**77.5**	---	0.274	mg/kg dry	10	12/22/20 15:57	EPA 6020B	**Q-42**
Mercury	ND	---	0.109	mg/kg dry	10	12/22/20 15:57	EPA 6020B	
Selenium	ND	---	1.37	mg/kg dry	10	12/22/20 15:57	EPA 6020B	
Silver	ND	---	0.274	mg/kg dry	10	12/22/20 15:57	EPA 6020B	
C004 (A0L0287-45)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**6.05**	---	1.22	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Barium	**613**	---	1.22	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Cadmium	**0.936**	---	0.243	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Chromium	**31.9**	---	1.22	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Lead	**355**	---	0.243	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Mercury	**0.292**	---	0.0972	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Selenium	ND	---	1.22	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
Silver	**0.511**	---	0.243	mg/kg dry	10	12/22/20 16:23	EPA 6020B	
C005 (A0L0287-46)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**6.76**	---	1.20	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
Barium	**231**	---	1.20	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
Cadmium	**0.315**	---	0.241	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
Chromium	**19.5**	---	1.20	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
Lead	**60.4**	---	0.241	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
Mercury	ND	---	0.0964	mg/kg dry	10	12/22/20 16:28	EPA 6020B	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
C005 (A0L0287-46)				**Matrix: Soil**				
Selenium	ND	---	1.20	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
Silver	ND	---	0.241	mg/kg dry	10	12/22/20 16:28	EPA 6020B	
C006 (A0L0287-47)				**Matrix: Soil**				
Batch: 0120759								
Arsenic	**7.30**	---	1.31	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Barium	**232**	---	1.31	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Cadmium	**0.577**	---	0.261	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Chromium	**21.4**	---	1.31	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Lead	**116**	---	0.261	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Mercury	**1.38**	---	0.104	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Selenium	ND	---	1.31	mg/kg dry	10	12/22/20 16:33	EPA 6020B	
Silver	ND	---	0.261	mg/kg dry	10	12/22/20 16:33	EPA 6020B	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

TCLP Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B10 1-2 (A0L0287-11)				**Matrix: Soil**				
Batch: 1012692								
Lead	**0.146**	---	0.0500	mg/L	10	01/08/21 20:15	1311/6020B	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**				
Batch: 1012692								
Lead	**0.0668**	---	0.0500	mg/L	10	01/08/21 20:20	1311/6020B	
B17 5.5-7.5 (A0L0287-31)				**Matrix: Soil**				
Batch: 1012692								
Lead	ND	---	0.0500	mg/L	10	01/08/21 20:25	1311/6020B	
B19 6.5-7 (A0L0287-33)				**Matrix: Soil**				
Batch: 1012692								
Lead	ND	---	0.0500	mg/L	10	01/08/21 20:31	1311/6020B	
C001 (A0L0287-42)				**Matrix: Soil**				
Batch: 1012692								
Lead	**0.994**	---	0.0500	mg/L	10	01/08/21 20:36	1311/6020B	
C004 (A0L0287-45)				**Matrix: Soil**				
Batch: 1012692								
Lead	ND	---	0.0500	mg/L	10	01/08/21 20:41	1311/6020B	
C006 (A0L0287-47)				**Matrix: Soil**				
Batch: 1012692								
Lead	ND	---	0.0500	mg/L	10	01/08/21 20:57	1311/6020B	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B1 3-3.5 (A0L0287-01)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**78.6**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B4 2-2.3 (A0L0287-03)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**78.5**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B4 5-5.5 (A0L0287-04)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**75.8**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B5 0.5-1 (A0L0287-05)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**77.8**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B6 0.5-1 (A0L0287-07)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**53.2**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B9 0.5-1 (A0L0287-09)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**76.5**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B10 1-2 (A0L0287-11)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**90.2**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B10 2-2.5 (A0L0287-12)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**81.0**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B13 1-2 (A0L0287-13)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**82.8**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B13 8.5-9 (A0L0287-14)				**Matrix: Soil**		**Batch: 0120848**		
% Solids	**88.5**	---	1.00	%	1	12/28/20 07:34	EPA 8000D	
B14 0.5-1 (A0L0287-15)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**83.5**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B15 0.5-1 (A0L0287-17)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**81.9**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B15 7.5-8.5 (A0L0287-18)				**Matrix: Soil**		**Batch: 0120472**		

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B15 7.5-8.5 (A0L0287-18)				**Matrix: Soil**		**Batch: 0120472**		
% Solids	**84.9**	---	1.00	%	1	12/15/20 08:35	EPA 8000D	
B15 9-9.5 (A0L0287-19)				**Matrix: Soil**		**Batch: 0120892**		
% Solids	**81.0**	---	1.00	%	1	12/29/20 08:57	EPA 8000D	
B16 5.5-6 (A0L0287-20)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**82.1**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B16 10.5-11 (A0L0287-21)				**Matrix: Soil**		**Batch: 0120848**		
% Solids	**86.5**	---	1.00	%	1	12/28/20 07:34	EPA 8000D	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 0120688**		
% Solids	**89.5**	---	1.00	%	1	12/21/20 07:31	EPA 8000D	
B8 1-1.5 (A0L0287-24)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**81.1**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B2 0.5-1 (A0L0287-25)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**81.5**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B18 5.5-6.5 (A0L0287-29)				**Matrix: Soil**		**Batch: 0120892**		
% Solids	**76.9**	---	1.00	%	1	12/29/20 08:57	EPA 8000D	
B17 0.5-1.5 (A0L0287-30)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**80.9**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
B17 5.5-7.5 (A0L0287-31)				**Matrix: Soil**		**Batch: 0120472**		
% Solids	**82.1**	---	1.00	%	1	12/15/20 08:35	EPA 8000D	
B17 11.5-12.5 (A0L0287-32)				**Matrix: Soil**		**Batch: 1020269**		
% Solids	**84.5**	---	1.00	%	1	02/09/21 07:54	EPA 8000D	
B19 6.5-7 (A0L0287-33)				**Matrix: Soil**		**Batch: 0120472**		
% Solids	**79.6**	---	1.00	%	1	12/15/20 08:35	EPA 8000D	
B19 12-13 (A0L0287-34)				**Matrix: Soil**		**Batch: 1020269**		

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B19 12-13 (A0L0287-34)				**Matrix: Soil**		**Batch: 1020269**		
% Solids	**83.8**	---	1.00	%	1	02/09/21 07:54	EPA 8000D	
B20 0.7-1.5 (A0L0287-35)				**Matrix: Soil**		**Batch: 0120369**		
% Solids	**79.2**	---	1.00	%	1	12/11/20 07:24	EPA 8000D	
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 0120537**		
% Solids	**85.7**	---	1.00	%	1	12/16/20 07:39	EPA 8000D	
C002 (A0L0287-43)				**Matrix: Soil**		**Batch: 0120537**		
% Solids	**81.5**	---	1.00	%	1	12/16/20 07:39	EPA 8000D	
C003 (A0L0287-44)				**Matrix: Soil**		**Batch: 0120537**		
% Solids	**78.6**	---	1.00	%	1	12/16/20 07:39	EPA 8000D	
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 0120537**		
% Solids	**85.3**	---	1.00	%	1	12/16/20 07:39	EPA 8000D	
C005 (A0L0287-46)				**Matrix: Soil**		**Batch: 0120537**		
% Solids	**80.9**	---	1.00	%	1	12/16/20 07:39	EPA 8000D	
C006 (A0L0287-47)				**Matrix: Soil**		**Batch: 0120537**		
% Solids	**81.7**	---	1.00	%	1	12/16/20 07:39	EPA 8000D	

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

ANALYTICAL SAMPLE RESULTS

TCLP Extraction by EPA 1311

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B10 1-2 (A0L0287-11)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	
B12 1-1.5 (A0L0287-23)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	
B17 5.5-7.5 (A0L0287-31)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	
B19 6.5-7 (A0L0287-33)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	
C001 (A0L0287-42)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	
C004 (A0L0287-45)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	
C006 (A0L0287-47)				**Matrix: Soil**		**Batch: 1012586**		
TCLP Extraction	PREP	---		N/A	1	01/07/21 15:15	EPA 1311	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120451 - EPA 3546 (Fuels)							**Soil**					
Blank (0120451-BLK1)			Prepared: 12/11/20 16:17		Analyzed: 12/11/20 21:46							
NWTPH-Dx												
Diesel	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 94 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (0120451-BS1)			Prepared: 12/11/20 16:17		Analyzed: 12/11/20 22:06							
NWTPH-Dx												
Diesel	106	---	20.0	mg/kg wet	1	125	---	84	73-115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 96 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120451-DUP1)			Prepared: 12/11/20 16:17		Analyzed: 12/11/20 22:46							
QC Source Sample: B16 5.5-6 (A0L0287-20)												
NWTPH-Dx												
Diesel	ND	---	23.2	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	46.5	mg/kg dry	1	---	46.9	---	---	***	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120451-DUP2)			Prepared: 12/11/20 16:17		Analyzed: 12/11/20 22:50							
QC Source Sample: Non-SDG (A0L0383-02)												
Diesel	ND	---	21.2	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**102**	---	42.4	mg/kg dry	1	---	104	---	---	1	30%	F-03
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Batch 0120557 - EPA 3546 (Fuels)							**Soil**					
Blank (0120557-BLK1)			Prepared: 12/15/20 12:42		Analyzed: 12/16/20 01:02							
NWTPH-Dx												
Diesel	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	36.4	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	---	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 99 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (0120557-BS1)			Prepared: 12/15/20 12:42		Analyzed: 12/16/20 01:22							

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120557 - EPA 3546 (Fuels)							**Soil**					
LCS (0120557-BS1)			Prepared: 12/15/20 12:42		Analyzed: 12/16/20 01:22							
NWTPH-Dx												
Diesel	114	---	20.0	mg/kg wet	1	125	---	91	73-115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 100 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120557-DUP1)			Prepared: 12/15/20 12:42		Analyzed: 12/16/20 03:03							
QC Source Sample: Non-SDG (A0L0333-02)												
Diesel	ND	---	20.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	40.0	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	**62.4**	---	40.0	mg/kg dry	1	---	62.6	---	---	0.2	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 81 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120557-DUP2)			Prepared: 12/15/20 12:42		Analyzed: 12/16/20 08:42							
QC Source Sample: Non-SDG (A0L0391-01)												
Diesel	ND	---	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	---	45.2	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 99 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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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 0120601 - EPA 3546 (Fuels)							**Soil**					
Blank (0120601-BLK1)			Prepared: 12/16/20 11:09		Analyzed: 12/16/20 21:34							
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (0120601-BS1)			Prepared: 12/16/20 11:09		Analyzed: 12/16/20 21:55							
NWTPH-Dx												
Diesel	102	---	20.0	mg/kg wet	1	125	---	82	73-115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 85 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120601-DUP2)			Prepared: 12/16/20 11:09		Analyzed: 12/16/20 23:35							
QC Source Sample: Non-SDG (A0L0407-11)												
Diesel	ND	---	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**112**	---	50.0	mg/kg dry	1	---	88.9	---	---	23	30%	F-03
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120601-DUP3)			Prepared: 12/16/20 11:09		Analyzed: 12/17/20 12:20							
QC Source Sample: Non-SDG (A0L0263-01RE1)												
Diesel	ND	---	19.9	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**162**	---	39.8	mg/kg dry	1	---	162	---	---	0.02	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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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 0120773 - EPA 3546 (Fuels)							**Soil**					
Blank (0120773-BLK1)			Prepared: 12/21/20 13:12		Analyzed: 12/21/20 22:01							
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 88 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (0120773-BS1)			Prepared: 12/21/20 13:12		Analyzed: 12/21/20 22:21							
NWTPH-Dx												
Diesel	104	---	20.0	mg/kg wet	1	125	---	83	73-115%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 90 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120773-DUP1)			Prepared: 12/21/20 13:12		Analyzed: 12/21/20 23:02							
QC Source Sample: B13 8.5-9 (A0L0287-14)												
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 66 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (0120773-DUP2)			Prepared: 12/21/20 13:13		Analyzed: 12/22/20 00:45							
QC Source Sample: Non-SDG (A0L0763-05)												
Diesel	ND	---	24.4	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	48.8	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 84 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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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 0120412 - EPA 5035A							**Soil**					
Blank (0120412-BLK1)			Prepared: 12/10/20 09:00 Analyzed: 12/10/20 19:34									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*102 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*106 %*		*50-150 %*			*"*				
LCS (0120412-BS2)			Prepared: 12/10/20 09:00 Analyzed: 12/10/20 19:07									
NWTPH-Gx (MS)												
Gasoline Range Organics	24.5	---	5.00	mg/kg wet	50	25.0	---	98	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*103 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*107 %*		*50-150 %*			*"*				
Duplicate (0120412-DUP1)			Prepared: 12/08/20 17:58 Analyzed: 12/10/20 23:38									**V-15**
QC Source Sample: Non-SDG (A0L0266-01)												
Gasoline Range Organics	**33.1**	---	7.51	mg/kg dry	50	---	29.6	---	---	11	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*114 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*105 %*		*50-150 %*			*"*				
Duplicate (0120412-DUP2)			Prepared: 12/07/20 09:20 Analyzed: 12/11/20 00:33									
QC Source Sample: B1 3-3.5 (A0L0287-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	6.29	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*108 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*106 %*		*50-150 %*			*"*				

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120428 - EPA 5035A							**Soil**					
Blank (0120428-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 11:19									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*102 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*			*"*				
LCS (0120428-BS2)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 10:52									
NWTPH-Gx (MS)												
Gasoline Range Organics	25.1	---	5.00	mg/kg wet	50	25.0	---	100	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*99 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*106 %*		*50-150 %*			*"*				
Duplicate (0120428-DUP1)			Prepared: 12/07/20 10:30 Analyzed: 12/11/20 20:50									
QC Source Sample: B6 0.5-1 (A0L0287-07)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	10.7	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*104 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*104 %*		*50-150 %*			*"*				
Duplicate (0120428-DUP2)			Prepared: 12/07/20 11:20 Analyzed: 12/11/20 21:44									
QC Source Sample: B13 1-2 (A0L0287-13)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.64	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*104 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*			*"*				

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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 0120456 - EPA 5035A							**Soil**					
Blank (0120456-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:54									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	B-02
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*102 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*			*"*				
LCS (0120456-BS2)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:27									
NWTPH-Gx (MS)												
Gasoline Range Organics	24.0	---	5.00	mg/kg wet	50	25.0	---	96	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*100 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*105 %*		*50-150 %*			*"*				
Duplicate (0120456-DUP1)			Prepared: 12/07/20 13:35 Analyzed: 12/12/20 03:37									
QC Source Sample: B15 0.5-1 (A0L0287-17)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	6.61	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*102 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*			*"*				
Duplicate (0120456-DUP2)			Prepared: 12/08/20 09:50 Analyzed: 12/12/20 04:32									
QC Source Sample: B17 0.5-1.5 (A0L0287-30)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	6.02	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*102 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*			*"*				

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120647 - EPA 5035A							**Soil**					
Blank (0120647-BLK1)			Prepared: 12/17/20 09:00		Analyzed: 12/17/20 12:36							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*		*50-150 %*		*"*					
LCS (0120647-BS2)			Prepared: 12/17/20 09:00		Analyzed: 12/17/20 12:09							
NWTPH-Gx (MS)												
Gasoline Range Organics	20.9	---	5.00	mg/kg wet	50	25.0	---	83	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*95 %*		*50-150 %*		*"*					
Duplicate (0120647-DUP1)			Prepared: 12/14/20 10:32		Analyzed: 12/17/20 21:42							
QC Source Sample: Non-SDG (A0L0492-01)												
Gasoline Range Organics	ND	---	6.85	mg/kg dry	50	---	16.9	---	---	***	**30%**	Q-04
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*		*50-150 %*		*"*					

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120740 - EPA 5035A							**Soil**					
Blank (0120740-BLK1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 17:53									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*95 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*90 %*		*50-150 %*			*"*				
LCS (0120740-BS2)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 17:26									
NWTPH-Gx (MS)												
Gasoline Range Organics	21.2	---	5.00	mg/kg wet	50	25.0	---	85	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*96 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*90 %*		*50-150 %*			*"*				
Duplicate (0120740-DUP1)			Prepared: 12/07/20 11:23 Analyzed: 12/19/20 21:58									
QC Source Sample: Non-SDG (A0L0292-08)												
Gasoline Range Organics	ND	---	8.28	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*95 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*85 %*		*50-150 %*			*"*				
Duplicate (0120740-DUP2)			Prepared: 12/07/20 12:20 Analyzed: 12/19/20 22:53									
QC Source Sample: Non-SDG (A0L0292-16)												
Gasoline Range Organics	ND	---	8.11	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*97 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*86 %*		*50-150 %*			*"*				

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Blank (0120412-BLK1)			Prepared: 12/10/20 09:00 Analyzed: 12/10/20 19:34									
5035A/8260D												
Acetone	ND	---	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Blank (0120412-BLK1)			Prepared: 12/10/20 09:00		Analyzed: 12/10/20 19:34							
1,2-Dichloropropane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	EST
1,2,3-Trichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 105 %* *Limits: 80-120 %* *Dilution: 1x*

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Blank (0120412-BLK1)				Prepared: 12/10/20 09:00 Analyzed: 12/10/20 19:34								
Surr: Toluene-d8 (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
LCS (0120412-BS1)				Prepared: 12/10/20 09:00 Analyzed: 12/10/20 18:40								
5035A/8260D												
Acetone	2160	---	1000	ug/kg wet	50	2000	---	108	80-120%	---	---	
Acrylonitrile	1200	---	250	ug/kg wet	50	1000	---	120	80-120%	---	---	
Benzene	1120	---	10.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Bromobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Bromochloromethane	1180	---	50.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
Bromodichloromethane	1200	---	50.0	ug/kg wet	50	1000	---	120	80-120%	---	---	
Bromoform	952	---	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
Bromomethane	1130	---	500	ug/kg wet	50	1000	---	113	80-120%	---	---	
2-Butanone (MEK)	2200	---	500	ug/kg wet	50	2000	---	110	80-120%	---	---	
n-Butylbenzene	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
sec-Butylbenzene	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
tert-Butylbenzene	1060	---	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Carbon disulfide	1380	---	500	ug/kg wet	50	1000	---	**138**	**80-120%**	---	---	Q-56
Carbon tetrachloride	1150	---	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
Chlorobenzene	1000	---	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Chloroethane	915	---	500	ug/kg wet	50	1000	---	92	80-120%	---	---	
Chloroform	1090	---	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Chloromethane	1140	---	250	ug/kg wet	50	1000	---	114	80-120%	---	---	
2-Chlorotoluene	1100	---	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
4-Chlorotoluene	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Dibromochloromethane	980	---	100	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2-Dibromo-3-chloropropane	979	---	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2-Dibromoethane (EDB)	1080	---	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Dibromomethane	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2-Dichlorobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,3-Dichlorobenzene	1090	---	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,4-Dichlorobenzene	996	---	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Dichlorodifluoromethane	1250	---	100	ug/kg wet	50	1000	---	**125**	**80-120%**	---	---	E-05
1,1-Dichloroethane	1150	---	25.0	ug/kg wet	50	1000	---	115	80-120%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
LCS (0120412-BS1)			Prepared: 12/10/20 09:00 Analyzed: 12/10/20 18:40									
1,2-Dichloroethane (EDC)	992	---	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,1-Dichloroethene	1160	---	25.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
cis-1,2-Dichloroethene	1170	---	25.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
trans-1,2-Dichloroethene	1160	---	25.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
1,2-Dichloropropane	1170	---	25.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
1,3-Dichloropropane	1060	---	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
2,2-Dichloropropane	1550	---	50.0	ug/kg wet	50	1000	---	**155**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
cis-1,3-Dichloropropene	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
trans-1,3-Dichloropropene	1090	---	100	ug/kg wet	50	1000	---	109	80-120%	---	---	
Ethylbenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Hexachlorobutadiene	1040	---	100	ug/kg wet	50	1000	---	104	80-120%	---	---	
2-Hexanone	1990	---	500	ug/kg wet	50	2000	---	100	80-120%	---	---	
Isopropylbenzene	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Isopropyltoluene	1100	---	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Methylene chloride	1050	---	500	ug/kg wet	50	1000	---	105	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2130	---	500	ug/kg wet	50	2000	---	107	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Naphthalene	1020	---	100	ug/kg wet	50	1000	---	102	80-120%	---	---	
n-Propylbenzene	1090	---	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Styrene	1030	---	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1010	---	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Tetrachloroethene (PCE)	1010	---	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Toluene	988	---	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2,3-Trichlorobenzene	1030	---	250	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2,4-Trichlorobenzene	1020	---	250	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,1,1-Trichloroethane	1140	---	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
1,1,2-Trichloroethane	1080	---	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Trichloroethene (TCE)	1120	---	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Trichlorofluoromethane	626	---	100	ug/kg wet	50	1000	---	**63**	**80-120%**	---	---	EST
1,2,3-Trichloropropane	1050	---	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2,4-Trimethylbenzene	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
1,3,5-Trimethylbenzene	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
LCS (0120412-BS1)			Prepared: 12/10/20 09:00 Analyzed: 12/10/20 18:40									
Vinyl chloride	1340	---	25.0	ug/kg wet	50	1000	---	**134**	**80-120%**	---	---	Q-56
m,p-Xylene	2100	---	50.0	ug/kg wet	50	2000	---	105	80-120%	---	---	
o-Xylene	1050	---	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				
Duplicate (0120412-DUP1)			Prepared: 12/08/20 17:58 Analyzed: 12/10/20 23:38									**V-15**
QC Source Sample: Non-SDG (A0L0266-01)												
Acetone	ND	---	1500	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	376	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	**308**	---	15.0	ug/kg dry	50	---	256	---	---	19	30%	
Bromobenzene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	150	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	75.1	ug/kg dry	50	---	78.3	---	---	***	**30%**	Q-05
sec-Butylbenzene	ND	---	75.1	ug/kg dry	50	---	77.6	---	---	***	30%	
tert-Butylbenzene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	376	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	150	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	376	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Duplicate (0120412-DUP1)			Prepared: 12/08/20 17:58		Analyzed: 12/10/20 23:38							**V-15**
QC Source Sample: Non-SDG (A0L0266-01)												
1,3-Dichlorobenzene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	150	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	150	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	**491**	---	37.6	ug/kg dry	50	---	320	---	---	**42**	**30%**	Q-04
Hexachlorobutadiene	ND	---	150	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	**110**	---	75.1	ug/kg dry	50	---	82.9	---	---	28	30%	
4-Isopropyltoluene	ND	---	75.1	ug/kg dry	50	---	43.0	---	---	***	30%	
Methylene chloride	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	751	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	**292**	---	150	ug/kg dry	50	---	257	---	---	13	30%	
n-Propylbenzene	**164**	---	37.6	ug/kg dry	50	---	160	---	---	2	30%	
Styrene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	376	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	376	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Duplicate (0120412-DUP1)			Prepared: 12/08/20 17:58 Analyzed: 12/10/20 23:38									**V-15**
QC Source Sample: Non-SDG (A0L0266-01)												
Trichloroethene (TCE)	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	150	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	75.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	**352**	---	75.1	ug/kg dry	50	---	238	---	---	**38**	**30%**	Q-05
1,3,5-Trimethylbenzene	**101**	---	75.1	ug/kg dry	50	---	76.0	---	---	29	30%	
Vinyl chloride	ND	---	37.6	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	**238**	---	75.1	ug/kg dry	50	---	141	---	---	**52**	**30%**	Q-05
o-Xylene	**69.1**	---	37.6	ug/kg dry	50	---	45.3	---	---	**42**	**30%**	Q-05
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				
Duplicate (0120412-DUP2)			Prepared: 12/07/20 09:20 Analyzed: 12/11/20 00:33									
QC Source Sample: B1 3-3.5 (A0L0287-01)												
5035A/8260D												
Acetone	ND	---	1260	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	315	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	12.6	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	315	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Duplicate (0120412-DUP2)			Prepared: 12/07/20 09:20 Analyzed: 12/11/20 00:33									
QC Source Sample: B1 3-3.5 (A0L0287-01)												
2-Chlorotoluene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	315	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	629	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Duplicate (0120412-DUP2)			Prepared: 12/07/20 09:20 Analyzed: 12/11/20 00:33									
QC Source Sample: B1 3-3.5 (A0L0287-01)												
1,1,2,2-Tetrachloroethane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	315	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	315	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	62.9	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	31.5	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*100 %*		*79-120 %*			*"*				
Matrix Spike (0120412-MS1)			Prepared: 12/07/20 10:05 Analyzed: 12/11/20 05:58									
QC Source Sample: B5 0.5-1 (A0L0287-05)												
5035A/8260D												
Acetone	2230	---	1240	ug/kg dry	50	2490	ND	89	36-164%	---	---	
Acrylonitrile	1090	---	311	ug/kg dry	50	1240	ND	88	65-134%	---	---	
Benzene	1370	---	12.4	ug/kg dry	50	1240	ND	110	77-121%	---	---	
Bromobenzene	1290	---	31.1	ug/kg dry	50	1240	ND	104	78-121%	---	---	
Bromochloromethane	1460	---	62.2	ug/kg dry	50	1240	ND	117	78-125%	---	---	
Bromodichloromethane	1460	---	62.2	ug/kg dry	50	1240	ND	118	75-127%	---	---	
Bromoform	1190	---	124	ug/kg dry	50	1240	ND	95	67-132%	---	---	
Bromomethane	1350	---	622	ug/kg dry	50	1240	ND	109	53-143%	---	---	
2-Butanone (MEK)	2820	---	622	ug/kg dry	50	2490	ND	113	51-148%	---	---	
n-Butylbenzene	1270	---	62.2	ug/kg dry	50	1240	ND	102	70-128%	---	---	
sec-Butylbenzene	1290	---	62.2	ug/kg dry	50	1240	ND	103	73-126%	---	---	

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Darrell Auvil, Project Manager

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Matrix Spike (0120412-MS1)			Prepared: 12/07/20 10:05 Analyzed: 12/11/20 05:58									
QC Source Sample: B5 0.5-1 (A0L0287-05)												
tert-Butylbenzene	1240	---	62.2	ug/kg dry	50	1240	ND	100	73-125%	---	---	
Carbon disulfide	1680	---	622	ug/kg dry	50	1240	ND	**135**	**63-132%**	---	---	Q-54d
Carbon tetrachloride	1380	---	62.2	ug/kg dry	50	1240	ND	111	70-135%	---	---	
Chlorobenzene	1230	---	31.1	ug/kg dry	50	1240	ND	99	79-120%	---	---	
Chloroethane	965	---	622	ug/kg dry	50	1240	ND	78	59-139%	---	---	
Chloroform	1320	---	62.2	ug/kg dry	50	1240	ND	106	78-123%	---	---	
Chloromethane	1360	---	311	ug/kg dry	50	1240	ND	109	50-136%	---	---	
2-Chlorotoluene	1330	---	62.2	ug/kg dry	50	1240	ND	107	75-122%	---	---	
4-Chlorotoluene	1350	---	62.2	ug/kg dry	50	1240	ND	108	72-124%	---	---	
Dibromochloromethane	1190	---	124	ug/kg dry	50	1240	ND	96	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1200	---	311	ug/kg dry	50	1240	ND	97	61-132%	---	---	
1,2-Dibromoethane (EDB)	1310	---	62.2	ug/kg dry	50	1240	ND	105	78-122%	---	---	
Dibromomethane	1360	---	62.2	ug/kg dry	50	1240	ND	109	78-125%	---	---	
1,2-Dichlorobenzene	1300	---	31.1	ug/kg dry	50	1240	ND	105	78-121%	---	---	
1,3-Dichlorobenzene	1320	---	31.1	ug/kg dry	50	1240	ND	106	77-121%	---	---	
1,4-Dichlorobenzene	1210	---	31.1	ug/kg dry	50	1240	ND	98	75-120%	---	---	
Dichlorodifluoromethane	1500	---	124	ug/kg dry	50	1240	ND	121	29-149%	---	---	E-05, Q-54k
1,1-Dichloroethane	1430	---	31.1	ug/kg dry	50	1240	ND	115	76-125%	---	---	
1,2-Dichloroethane (EDC)	1230	---	31.1	ug/kg dry	50	1240	ND	99	73-128%	---	---	
1,1-Dichloroethene	1410	---	31.1	ug/kg dry	50	1240	ND	114	70-131%	---	---	
cis-1,2-Dichloroethene	1420	---	31.1	ug/kg dry	50	1240	ND	114	77-123%	---	---	
trans-1,2-Dichloroethene	1400	---	31.1	ug/kg dry	50	1240	ND	112	74-125%	---	---	
1,2-Dichloropropane	1440	---	31.1	ug/kg dry	50	1240	ND	116	76-123%	---	---	
1,3-Dichloropropane	1310	---	62.2	ug/kg dry	50	1240	ND	106	77-121%	---	---	
2,2-Dichloropropane	1250	---	62.2	ug/kg dry	50	1240	ND	100	67-133%	---	---	Q-54h
1,1-Dichloropropene	1340	---	62.2	ug/kg dry	50	1240	ND	108	76-125%	---	---	
cis-1,3-Dichloropropene	1290	---	62.2	ug/kg dry	50	1240	ND	104	74-126%	---	---	
trans-1,3-Dichloropropene	1250	---	124	ug/kg dry	50	1240	ND	100	71-130%	---	---	
Ethylbenzene	1290	---	31.1	ug/kg dry	50	1240	ND	104	76-122%	---	---	
Hexachlorobutadiene	1230	---	124	ug/kg dry	50	1240	ND	99	61-135%	---	---	
2-Hexanone	2660	---	622	ug/kg dry	50	2490	ND	107	53-145%	---	---	
Isopropylbenzene	1280	---	62.2	ug/kg dry	50	1240	ND	103	68-134%	---	---	
4-Isopropyltoluene	1260	---	62.2	ug/kg dry	50	1240	ND	101	73-127%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - EPA 5035A							**Soil**					
Matrix Spike (0120412-MS1)			Prepared: 12/07/20 10:05 Analyzed: 12/11/20 05:58									
QC Source Sample: B5 0.5-1 (A0L0287-05)												
Methylene chloride	1340	---	622	ug/kg dry	50	1240	ND	108	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2800	---	622	ug/kg dry	50	2490	ND	113	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1330	---	62.2	ug/kg dry	50	1240	ND	107	73-125%	---	---	
Naphthalene	1130	---	124	ug/kg dry	50	1240	ND	91	62-129%	---	---	
n-Propylbenzene	1260	---	31.1	ug/kg dry	50	1240	ND	101	73-125%	---	---	
Styrene	1290	---	62.2	ug/kg dry	50	1240	ND	104	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1220	---	62.2	ug/kg dry	50	1240	ND	98	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1370	---	62.2	ug/kg dry	50	1240	ND	110	70-124%	---	---	
Tetrachloroethene (PCE)	1220	---	31.1	ug/kg dry	50	1240	ND	98	73-128%	---	---	
Toluene	1200	---	62.2	ug/kg dry	50	1240	ND	97	77-121%	---	---	
1,2,3-Trichlorobenzene	1210	---	311	ug/kg dry	50	1240	ND	97	66-130%	---	---	
1,2,4-Trichlorobenzene	1160	---	311	ug/kg dry	50	1240	ND	93	67-129%	---	---	
1,1,1-Trichloroethane	1360	---	31.1	ug/kg dry	50	1240	ND	110	73-130%	---	---	
1,1,2-Trichloroethane	1320	---	31.1	ug/kg dry	50	1240	ND	106	78-121%	---	---	
Trichloroethene (TCE)	1370	---	31.1	ug/kg dry	50	1240	ND	110	77-123%	---	---	
Trichlorofluoromethane	2270	---	124	ug/kg dry	50	1240	ND	**182**	**62-140%**	---	---	EST
1,2,3-Trichloropropane	1330	---	62.2	ug/kg dry	50	1240	ND	107	73-125%	---	---	
1,2,4-Trimethylbenzene	1320	---	62.2	ug/kg dry	50	1240	ND	106	75-123%	---	---	
1,3,5-Trimethylbenzene	1330	---	62.2	ug/kg dry	50	1240	ND	107	73-124%	---	---	
Vinyl chloride	1720	---	31.1	ug/kg dry	50	1240	ND	**139**	**56-135%**	---	---	Q-54c
m,p-Xylene	2590	---	62.2	ug/kg dry	50	2490	ND	104	77-124%	---	---	
o-Xylene	1290	---	31.1	ug/kg dry	50	1240	ND	104	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*				*"*			

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Blank (0120428-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 11:19									
5035A/8260D												
Acetone	ND	---	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	Q-30
Chloroform	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Blank (0120428-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 11:19									
1,2-Dichloropropane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	EST
1,2,3-Trichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 105 %* *Limits: 80-120 %* *Dilution: 1x*

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Blank (0120428-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 11:19									
Surr: Toluene-d8 (Surr)			*Recovery: 101 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
LCS (0120428-BS1)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 10:25									
5035A/8260D												
Acetone	1840	---	1000	ug/kg wet	50	2000	---	92	80-120%	---	---	
Acrylonitrile	970	---	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
Benzene	1150	---	10.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
Bromobenzene	1100	---	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Bromochloromethane	1150	---	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
Bromodichloromethane	1220	---	50.0	ug/kg wet	50	1000	---	**122**	**80-120%**	---	---	Q-56
Bromoform	982	---	100	ug/kg wet	50	1000	---	98	80-120%	---	---	
Bromomethane	1090	---	500	ug/kg wet	50	1000	---	109	80-120%	---	---	
2-Butanone (MEK)	2230	---	500	ug/kg wet	50	2000	---	112	80-120%	---	---	
n-Butylbenzene	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
sec-Butylbenzene	1160	---	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
tert-Butylbenzene	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Carbon disulfide	1410	---	500	ug/kg wet	50	1000	---	**141**	**80-120%**	---	---	Q-56
Carbon tetrachloride	1210	---	50.0	ug/kg wet	50	1000	---	**121**	**80-120%**	---	---	Q-56
Chlorobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Chloroethane	690	---	500	ug/kg wet	50	1000	---	**69**	**80-120%**	---	---	Q-30
Chloroform	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Chloromethane	1120	---	250	ug/kg wet	50	1000	---	112	80-120%	---	---	
2-Chlorotoluene	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
4-Chlorotoluene	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Dibromochloromethane	1010	---	100	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,2-Dibromo-3-chloropropane	980	---	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,2-Dibromoethane (EDB)	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Dibromomethane	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,2-Dichlorobenzene	1090	---	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,3-Dichlorobenzene	1130	---	25.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,4-Dichlorobenzene	1030	---	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Dichlorodifluoromethane	1270	---	100	ug/kg wet	50	1000	---	**127**	**80-120%**	---	---	E-05
1,1-Dichloroethane	1150	---	25.0	ug/kg wet	50	1000	---	115	80-120%	---	---	

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
LCS (0120428-BS1)			Prepared: 12/11/20 09:00 Analyzed: 12/11/20 10:25									
1,2-Dichloroethane (EDC)	1020	---	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,1-Dichloroethene	1180	---	25.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
cis-1,2-Dichloroethene	1180	---	25.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
trans-1,2-Dichloroethene	1190	---	25.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
1,2-Dichloropropane	1170	---	25.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
1,3-Dichloropropane	1090	---	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
2,2-Dichloropropane	1570	---	50.0	ug/kg wet	50	1000	---	**157**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	1150	---	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
cis-1,3-Dichloropropene	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
trans-1,3-Dichloropropene	1100	---	100	ug/kg wet	50	1000	---	110	80-120%	---	---	
Ethylbenzene	1100	---	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Hexachlorobutadiene	1070	---	100	ug/kg wet	50	1000	---	107	80-120%	---	---	
2-Hexanone	1970	---	500	ug/kg wet	50	2000	---	98	80-120%	---	---	
Isopropylbenzene	1100	---	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
4-Isopropyltoluene	1130	---	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Methylene chloride	1070	---	500	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2090	---	500	ug/kg wet	50	2000	---	104	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1100	---	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Naphthalene	939	---	100	ug/kg wet	50	1000	---	94	80-120%	---	---	
n-Propylbenzene	1110	---	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Styrene	1080	---	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1060	---	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1120	---	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Tetrachloroethene (PCE)	1100	---	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Toluene	1030	---	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2,3-Trichlorobenzene	1060	---	250	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2,4-Trichlorobenzene	992	---	250	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,1,1-Trichloroethane	1190	---	25.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
1,1,2-Trichloroethane	1110	---	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Trichloroethene (TCE)	1160	---	25.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
Trichlorofluoromethane	518	---	100	ug/kg wet	50	1000	---	**52**	**80-120%**	---	---	EST
1,2,3-Trichloropropane	1060	---	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2,4-Trimethylbenzene	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
1,3,5-Trimethylbenzene	1170	---	50.0	ug/kg wet	50	1000	---	117	80-120%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
LCS (0120428-BS1)			Prepared: 12/11/20 09:00		Analyzed: 12/11/20 10:25							
Vinyl chloride	1330	---	25.0	ug/kg wet	50	1000	---	**133**	**80-120%**	---	---	Q-56
m,p-Xylene	2190	---	50.0	ug/kg wet	50	2000	---	110	80-120%	---	---	
o-Xylene	1090	---	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				
Duplicate (0120428-DUP1)			Prepared: 12/07/20 10:30		Analyzed: 12/11/20 20:50							
QC Source Sample: B6 0.5-1 (A0L0287-07)												
5035A/8260D												
Acetone	ND	---	2150	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	537	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	21.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
Chloroform	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	537	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	537	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Duplicate (0120428-DUP1)			Prepared: 12/07/20 10:30 Analyzed: 12/11/20 20:50									
QC Source Sample: B6 0.5-1 (A0L0287-07)												
1,2-Dichlorobenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	1070	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	537	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	537	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Duplicate (0120428-DUP1)			Prepared: 12/07/20 10:30 Analyzed: 12/11/20 20:50									
QC Source Sample: B6 0.5-1 (A0L0287-07)												
1,1,2-Trichloroethane	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	215	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	107	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	53.7	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*100 %*		*79-120 %*			*"*				
Duplicate (0120428-DUP2)			Prepared: 12/07/20 11:20 Analyzed: 12/11/20 21:44									
QC Source Sample: B13 1-2 (A0L0287-13)												
5035A/8260D												
Acetone	ND	---	1130	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	282	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	11.3	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
Chloroform	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Duplicate (0120428-DUP2)			Prepared: 12/07/20 11:20 Analyzed: 12/11/20 21:44									
QC Source Sample: B13 1-2 (A0L0287-13)												
Chloromethane	ND	---	282	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	282	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	564	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Duplicate (0120428-DUP2)			Prepared: 12/07/20 11:20 Analyzed: 12/11/20 21:44									
QC Source Sample: B13 1-2 (A0L0287-13)												
1,1,1,2-Tetrachloroethane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	282	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	282	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	113	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	56.4	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	28.2	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*			*"*					
Matrix Spike (0120428-MS1)			Prepared: 12/07/20 13:00 Analyzed: 12/11/20 22:39									
QC Source Sample: B14 0.5-1 (A0L0287-15)												
5035A/8260D												
Acetone	1640	---	931	ug/kg dry	50	1860	ND	88	36-164%	---	---	
Acrylonitrile	801	---	233	ug/kg dry	50	929	ND	86	65-134%	---	---	
Benzene	1020	---	9.31	ug/kg dry	50	929	ND	110	77-121%	---	---	
Bromobenzene	987	---	23.3	ug/kg dry	50	929	ND	106	78-121%	---	---	
Bromochloromethane	1060	---	46.5	ug/kg dry	50	929	ND	115	78-125%	---	---	
Bromodichloromethane	1090	---	46.5	ug/kg dry	50	929	ND	117	75-127%	---	---	Q-54e
Bromoform	889	---	93.1	ug/kg dry	50	929	ND	96	67-132%	---	---	
Bromomethane	1040	---	465	ug/kg dry	50	929	ND	112	53-143%	---	---	
2-Butanone (MEK)	1540	---	465	ug/kg dry	50	1860	ND	83	51-148%	---	---	
n-Butylbenzene	992	---	46.5	ug/kg dry	50	929	ND	107	70-128%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Matrix Spike (0120428-MS1)			Prepared: 12/07/20 13:00		Analyzed: 12/11/20 22:39							
QC Source Sample: B14 0.5-1 (A0L0287-15)												
sec-Butylbenzene	1010	---	46.5	ug/kg dry	50	929	ND	109	73-126%	---	---	
tert-Butylbenzene	945	---	46.5	ug/kg dry	50	929	ND	102	73-125%	---	---	
Carbon disulfide	1250	---	465	ug/kg dry	50	929	ND	**135**	**63-132%**	---	---	Q-54f
Carbon tetrachloride	1050	---	46.5	ug/kg dry	50	929	ND	113	70-135%	---	---	Q-54
Chlorobenzene	934	---	23.3	ug/kg dry	50	929	ND	100	79-120%	---	---	
Chloroethane	695	---	465	ug/kg dry	50	929	ND	75	59-139%	---	---	Q-30
Chloroform	996	---	46.5	ug/kg dry	50	929	ND	107	78-123%	---	---	
Chloromethane	1000	---	233	ug/kg dry	50	929	ND	108	50-136%	---	---	
2-Chlorotoluene	1000	---	46.5	ug/kg dry	50	929	ND	108	75-122%	---	---	
4-Chlorotoluene	1020	---	46.5	ug/kg dry	50	929	ND	110	72-124%	---	---	
Dibromochloromethane	893	---	93.1	ug/kg dry	50	929	ND	96	74-126%	---	---	
1,2-Dibromo-3-chloropropane	890	---	233	ug/kg dry	50	929	ND	96	61-132%	---	---	
1,2-Dibromoethane (EDB)	981	---	46.5	ug/kg dry	50	929	ND	105	78-122%	---	---	
Dibromomethane	1020	---	46.5	ug/kg dry	50	929	ND	110	78-125%	---	---	
1,2-Dichlorobenzene	985	---	23.3	ug/kg dry	50	929	ND	106	78-121%	---	---	
1,3-Dichlorobenzene	998	---	23.3	ug/kg dry	50	929	ND	107	77-121%	---	---	
1,4-Dichlorobenzene	908	---	23.3	ug/kg dry	50	929	ND	98	75-120%	---	---	
Dichlorodifluoromethane	1130	---	93.1	ug/kg dry	50	929	ND	122	29-149%	---	---	E-05
1,1-Dichloroethane	1060	---	23.3	ug/kg dry	50	929	ND	114	76-125%	---	---	
1,2-Dichloroethane (EDC)	909	---	23.3	ug/kg dry	50	929	ND	98	73-128%	---	---	
1,1-Dichloroethene	1060	---	23.3	ug/kg dry	50	929	ND	114	70-131%	---	---	
cis-1,2-Dichloroethene	1060	---	23.3	ug/kg dry	50	929	ND	114	77-123%	---	---	
trans-1,2-Dichloroethene	1040	---	23.3	ug/kg dry	50	929	ND	112	74-125%	---	---	
1,2-Dichloropropane	1070	---	23.3	ug/kg dry	50	929	ND	115	76-123%	---	---	
1,3-Dichloropropane	974	---	46.5	ug/kg dry	50	929	ND	105	77-121%	---	---	
2,2-Dichloropropane	1110	---	46.5	ug/kg dry	50	929	ND	120	67-133%	---	---	Q-54i
1,1-Dichloropropene	1010	---	46.5	ug/kg dry	50	929	ND	109	76-125%	---	---	
cis-1,3-Dichloropropene	995	---	46.5	ug/kg dry	50	929	ND	107	74-126%	---	---	
trans-1,3-Dichloropropene	962	---	93.1	ug/kg dry	50	929	ND	104	71-130%	---	---	
Ethylbenzene	976	---	23.3	ug/kg dry	50	929	ND	105	76-122%	---	---	
Hexachlorobutadiene	960	---	93.1	ug/kg dry	50	929	ND	103	61-135%	---	---	
2-Hexanone	1890	---	465	ug/kg dry	50	1860	ND	102	53-145%	---	---	
Isopropylbenzene	975	---	46.5	ug/kg dry	50	929	ND	105	68-134%	---	---	

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120428 - EPA 5035A							**Soil**					
Matrix Spike (0120428-MS1)			Prepared: 12/07/20 13:00 Analyzed: 12/11/20 22:39									
QC Source Sample: B14 0.5-1 (A0L0287-15)												
4-Isopropyltoluene	988	---	46.5	ug/kg dry	50	929	ND	106	73-127%	---	---	
Methylene chloride	999	---	465	ug/kg dry	50	929	ND	108	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2000	---	465	ug/kg dry	50	1860	ND	108	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	990	---	46.5	ug/kg dry	50	929	ND	107	73-125%	---	---	
Naphthalene	866	---	93.1	ug/kg dry	50	929	ND	93	62-129%	---	---	
n-Propylbenzene	968	---	23.3	ug/kg dry	50	929	ND	104	73-125%	---	---	
Styrene	972	---	46.5	ug/kg dry	50	929	ND	105	76-124%	---	---	
1,1,1,2-Tetrachloroethane	930	---	46.5	ug/kg dry	50	929	ND	100	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1020	---	46.5	ug/kg dry	50	929	ND	110	70-124%	---	---	
Tetrachloroethene (PCE)	930	---	23.3	ug/kg dry	50	929	ND	100	73-128%	---	---	
Toluene	904	---	46.5	ug/kg dry	50	929	ND	97	77-121%	---	---	
1,2,3-Trichlorobenzene	929	---	233	ug/kg dry	50	929	ND	100	66-130%	---	---	
1,2,4-Trichlorobenzene	895	---	233	ug/kg dry	50	929	ND	96	67-129%	---	---	
1,1,1-Trichloroethane	1040	---	23.3	ug/kg dry	50	929	ND	111	73-130%	---	---	
1,1,2-Trichloroethane	982	---	23.3	ug/kg dry	50	929	ND	106	78-121%	---	---	
Trichloroethene (TCE)	1030	---	23.3	ug/kg dry	50	929	ND	111	77-123%	---	---	
Trichlorofluoromethane	1020	---	93.1	ug/kg dry	50	929	ND	110	62-140%	---	---	EST
1,2,3-Trichloropropane	989	---	46.5	ug/kg dry	50	929	ND	106	73-125%	---	---	
1,2,4-Trimethylbenzene	1020	---	46.5	ug/kg dry	50	929	ND	109	75-123%	---	---	
1,3,5-Trimethylbenzene	1040	---	46.5	ug/kg dry	50	929	ND	112	73-124%	---	---	
Vinyl chloride	1250	---	23.3	ug/kg dry	50	929	ND	134	56-135%	---	---	Q-54b
m,p-Xylene	1950	---	46.5	ug/kg dry	50	1860	ND	105	77-124%	---	---	
o-Xylene	974	---	23.3	ug/kg dry	50	929	ND	105	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Blank (0120456-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:54									
5035A/8260D												
Acetone	ND	---	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	Q-30
Chloroform	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Blank (0120456-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:54									
1,2-Dichloropropane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	B-02
Hexachlorobutadiene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	**17.0**	---	16.7	ug/kg wet	50	---	---	---	---	---	---	B
Styrene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	EST
1,2,3-Trichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	**124**	---	33.3	ug/kg wet	50	---	---	---	---	---	---	B
1,3,5-Trimethylbenzene	**48.7**	---	33.3	ug/kg wet	50	---	---	---	---	---	---	B
Vinyl chloride	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	**73.0**	---	33.3	ug/kg wet	50	---	---	---	---	---	---	B
o-Xylene	**23.3**	---	16.7	ug/kg wet	50	---	---	---	---	---	---	B
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*	*Limits: 80-120 %*				*Dilution: 1x*				

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Darrell Auvil, Project Manager

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Blank (0120456-BLK1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:54									
Surr: Toluene-d8 (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*				*"*				
LCS (0120456-BS1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:00									
5035A/8260D												
Acetone	1880	---	1000	ug/kg wet	50	2000	---	94	80-120%	---	---	
Acrylonitrile	937	---	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
Benzene	1110	---	10.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Bromobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Bromochloromethane	1150	---	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
Bromodichloromethane	1180	---	50.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
Bromoform	954	---	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
Bromomethane	1070	---	500	ug/kg wet	50	1000	---	107	80-120%	---	---	
2-Butanone (MEK)	2230	---	500	ug/kg wet	50	2000	---	112	80-120%	---	---	
n-Butylbenzene	1080	---	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
sec-Butylbenzene	1090	---	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
tert-Butylbenzene	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Carbon disulfide	1330	---	500	ug/kg wet	50	1000	---	**133**	**80-120%**	---	---	Q-56
Carbon tetrachloride	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
Chlorobenzene	1020	---	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Chloroethane	692	---	500	ug/kg wet	50	1000	---	**69**	**80-120%**	---	---	Q-30
Chloroform	1080	---	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Chloromethane	1080	---	250	ug/kg wet	50	1000	---	108	80-120%	---	---	
2-Chlorotoluene	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Chlorotoluene	1110	---	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Dibromochloromethane	972	---	100	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2-Dibromo-3-chloropropane	972	---	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2-Dibromoethane (EDB)	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Dibromomethane	1110	---	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,2-Dichlorobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,3-Dichlorobenzene	1100	---	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,4-Dichlorobenzene	1000	---	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Dichlorodifluoromethane	1150	---	100	ug/kg wet	50	1000	---	115	80-120%	---	---	E-05
1,1-Dichloroethane	1140	---	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
LCS (0120456-BS1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:00									
1,2-Dichloroethane (EDC)	998	---	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,1-Dichloroethene	1120	---	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
cis-1,2-Dichloroethene	1140	---	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
trans-1,2-Dichloroethene	1120	---	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2-Dichloropropane	1150	---	25.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
1,3-Dichloropropane	1060	---	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
2,2-Dichloropropane	1280	---	50.0	ug/kg wet	50	1000	---	**128**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
cis-1,3-Dichloropropene	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
trans-1,3-Dichloropropene	1060	---	100	ug/kg wet	50	1000	---	106	80-120%	---	---	
Ethylbenzene	1050	---	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	B-02
Hexachlorobutadiene	1040	---	100	ug/kg wet	50	1000	---	104	80-120%	---	---	
2-Hexanone	1940	---	500	ug/kg wet	50	2000	---	97	80-120%	---	---	
Isopropylbenzene	1050	---	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
4-Isopropyltoluene	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Methylene chloride	1060	---	500	ug/kg wet	50	1000	---	106	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2080	---	500	ug/kg wet	50	2000	---	104	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1080	---	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Naphthalene	926	---	100	ug/kg wet	50	1000	---	93	80-120%	---	---	
n-Propylbenzene	1050	---	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	B
Styrene	1030	---	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Tetrachloroethene (PCE)	1010	---	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Toluene	972	---	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	1000	---	250	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	955	---	250	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,1,1-Trichloroethane	1130	---	25.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,1,2-Trichloroethane	1080	---	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Trichloroethene (TCE)	1150	---	25.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
Trichlorofluoromethane	578	---	100	ug/kg wet	50	1000	---	**58**	**80-120%**	---	---	EST, Q-55
1,2,3-Trichloropropane	1030	---	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	1110	---	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	B
1,3,5-Trimethylbenzene	1140	---	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	B

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
LCS (0120456-BS1)			Prepared: 12/11/20 09:00 Analyzed: 12/12/20 00:00									
Vinyl chloride	1280	---	25.0	ug/kg wet	50	1000	---	**128**	**80-120%**	---	---	Q-56
m,p-Xylene	2120	---	50.0	ug/kg wet	50	2000	---	106	80-120%	---	---	B
o-Xylene	1050	---	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	B
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				
Duplicate (0120456-DUP1)			Prepared: 12/07/20 13:35 Analyzed: 12/12/20 03:37									
QC Source Sample: B15 0.5-1 (A0L0287-17)												
5035A/8260D												
Acetone	ND	---	1320	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	331	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	13.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
Chloroform	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	331	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	331	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Duplicate (0120456-DUP1)			Prepared: 12/07/20 13:35 Analyzed: 12/12/20 03:37									
QC Source Sample: B15 0.5-1 (A0L0287-17)												
1,2-Dichlorobenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	661	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	331	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	331	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Duplicate (0120456-DUP1)			Prepared: 12/07/20 13:35 Analyzed: 12/12/20 03:37									
QC Source Sample: B15 0.5-1 (A0L0287-17)												
1,1,2-Trichloroethane	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	33.1	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
Duplicate (0120456-DUP2)			Prepared: 12/08/20 09:50 Analyzed: 12/12/20 04:32									
QC Source Sample: B17 0.5-1.5 (A0L0287-30)												
5035A/8260D												
Acetone	ND	---	1200	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	301	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	12.0	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	Q-30
Chloroform	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Duplicate (0120456-DUP2)			Prepared: 12/08/20 09:50 Analyzed: 12/12/20 04:32									
QC Source Sample: B17 0.5-1.5 (A0L0287-30)												
Chloromethane	ND	---	301	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	301	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	602	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Duplicate (0120456-DUP2)			Prepared: 12/08/20 09:50 Analyzed: 12/12/20 04:32									
QC Source Sample: B17 0.5-1.5 (A0L0287-30)												
1,1,1,2-Tetrachloroethane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	301	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	301	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	120	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	60.2	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	30.1	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*			*"*					
Matrix Spike (0120456-MS1)			Prepared: 12/07/20 12:05 Analyzed: 12/12/20 05:26									
QC Source Sample: Non-SDG (A0L0292-13)												
5035A/8260D												
Acetone	2480	---	1450	ug/kg dry	50	2890	ND	86	36-164%	---	---	
Acrylonitrile	1280	---	362	ug/kg dry	50	1450	ND	88	65-134%	---	---	
Benzene	1570	---	14.5	ug/kg dry	50	1450	ND	108	77-121%	---	---	
Bromobenzene	1490	---	36.2	ug/kg dry	50	1450	ND	103	78-121%	---	---	
Bromochloromethane	1640	---	72.4	ug/kg dry	50	1450	ND	113	78-125%	---	---	
Bromodichloromethane	1750	---	72.4	ug/kg dry	50	1450	ND	121	75-127%	---	---	
Bromoform	1460	---	145	ug/kg dry	50	1450	ND	101	67-132%	---	---	
Bromomethane	1630	---	724	ug/kg dry	50	1450	ND	112	53-143%	---	---	
2-Butanone (MEK)	3070	---	724	ug/kg dry	50	2890	ND	106	51-148%	---	---	
n-Butylbenzene	1640	---	72.4	ug/kg dry	50	1450	ND	113	70-128%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Matrix Spike (0120456-MS1)			Prepared: 12/07/20 12:05		Analyzed: 12/12/20 05:26							
QC Source Sample: Non-SDG (A0L0292-13)												
sec-Butylbenzene	1600	---	72.4	ug/kg dry	50	1450	ND	111	73-126%	---	---	
tert-Butylbenzene	1550	---	72.4	ug/kg dry	50	1450	ND	104	73-125%	---	---	
Carbon disulfide	1960	---	724	ug/kg dry	50	1450	ND	**136**	**63-132%**	---	---	Q-54b
Carbon tetrachloride	1650	---	72.4	ug/kg dry	50	1450	ND	114	70-135%	---	---	
Chlorobenzene	1450	---	36.2	ug/kg dry	50	1450	ND	100	79-120%	---	---	
Chloroethane	1480	---	724	ug/kg dry	50	1450	ND	102	59-139%	---	---	Q-30
Chloroform	1580	---	72.4	ug/kg dry	50	1450	ND	109	78-123%	---	---	
Chloromethane	1500	---	362	ug/kg dry	50	1450	ND	104	50-136%	---	---	
2-Chlorotoluene	1580	---	72.4	ug/kg dry	50	1450	ND	109	75-122%	---	---	
4-Chlorotoluene	1580	---	72.4	ug/kg dry	50	1450	ND	109	72-124%	---	---	
Dibromochloromethane	1430	---	145	ug/kg dry	50	1450	ND	99	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1510	---	362	ug/kg dry	50	1450	ND	105	61-132%	---	---	
1,2-Dibromoethane (EDB)	1540	---	72.4	ug/kg dry	50	1450	ND	106	78-122%	---	---	
Dibromomethane	1590	---	72.4	ug/kg dry	50	1450	ND	110	78-125%	---	---	
1,2-Dichlorobenzene	1570	---	36.2	ug/kg dry	50	1450	ND	109	78-121%	---	---	
1,3-Dichlorobenzene	1550	---	36.2	ug/kg dry	50	1450	ND	107	77-121%	---	---	
1,4-Dichlorobenzene	1440	---	36.2	ug/kg dry	50	1450	ND	99	75-120%	---	---	
Dichlorodifluoromethane	1750	---	145	ug/kg dry	50	1450	ND	121	29-149%	---	---	E-05
1,1-Dichloroethane	1620	---	36.2	ug/kg dry	50	1450	ND	112	76-125%	---	---	
1,2-Dichloroethane (EDC)	1460	---	36.2	ug/kg dry	50	1450	ND	101	73-128%	---	---	
1,1-Dichloroethene	1660	---	36.2	ug/kg dry	50	1450	ND	115	70-131%	---	---	
cis-1,2-Dichloroethene	1610	---	36.2	ug/kg dry	50	1450	ND	112	77-123%	---	---	
trans-1,2-Dichloroethene	1580	---	36.2	ug/kg dry	50	1450	ND	109	74-125%	---	---	
1,2-Dichloropropane	1620	---	36.2	ug/kg dry	50	1450	ND	112	76-123%	---	---	
1,3-Dichloropropane	1470	---	72.4	ug/kg dry	50	1450	ND	102	77-121%	---	---	
2,2-Dichloropropane	1590	---	72.4	ug/kg dry	50	1450	ND	110	67-133%	---	---	Q-54l
1,1-Dichloropropene	1520	---	72.4	ug/kg dry	50	1450	ND	105	76-125%	---	---	
cis-1,3-Dichloropropene	1460	---	72.4	ug/kg dry	50	1450	ND	101	74-126%	---	---	
trans-1,3-Dichloropropene	1450	---	145	ug/kg dry	50	1450	ND	100	71-130%	---	---	
Ethylbenzene	1510	---	36.2	ug/kg dry	50	1450	ND	104	76-122%	---	---	B-02
Hexachlorobutadiene	1670	---	145	ug/kg dry	50	1450	ND	116	61-135%	---	---	
2-Hexanone	2930	---	724	ug/kg dry	50	2890	ND	101	53-145%	---	---	
Isopropylbenzene	1570	---	72.4	ug/kg dry	50	1450	ND	109	68-134%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120456 - EPA 5035A							**Soil**					
Matrix Spike (0120456-MS1)			Prepared: 12/07/20 12:05 Analyzed: 12/12/20 05:26									
QC Source Sample: Non-SDG (A0L0292-13)												
4-Isopropyltoluene	1580	---	72.4	ug/kg dry	50	1450	ND	109	73-127%	---	---	
Methylene chloride	1550	---	724	ug/kg dry	50	1450	ND	107	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3100	---	724	ug/kg dry	50	2890	ND	107	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1560	---	72.4	ug/kg dry	50	1450	ND	108	73-125%	---	---	
Naphthalene	1520	---	145	ug/kg dry	50	1450	ND	105	62-129%	---	---	
n-Propylbenzene	1470	---	36.2	ug/kg dry	50	1450	ND	101	73-125%	---	---	B
Styrene	1570	---	72.4	ug/kg dry	50	1450	ND	109	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1470	---	72.4	ug/kg dry	50	1450	ND	102	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1670	---	72.4	ug/kg dry	50	1450	ND	109	70-124%	---	---	
Tetrachloroethene (PCE)	1460	---	36.2	ug/kg dry	50	1450	ND	101	73-128%	---	---	
Toluene	1360	---	72.4	ug/kg dry	50	1450	ND	94	77-121%	---	---	
1,2,3-Trichlorobenzene	1500	---	362	ug/kg dry	50	1450	ND	103	66-130%	---	---	
1,2,4-Trichlorobenzene	1540	---	362	ug/kg dry	50	1450	ND	106	67-129%	---	---	
1,1,1-Trichloroethane	1650	---	36.2	ug/kg dry	50	1450	ND	114	73-130%	---	---	
1,1,2-Trichloroethane	1520	---	36.2	ug/kg dry	50	1450	ND	105	78-121%	---	---	
Trichloroethene (TCE)	1590	---	36.2	ug/kg dry	50	1450	ND	110	77-123%	---	---	
Trichlorofluoromethane	3830	---	145	ug/kg dry	50	1450	ND	**265**	**62-140%**	---	---	EST, Q-54n
1,2,3-Trichloropropane	1540	---	72.4	ug/kg dry	50	1450	ND	106	73-125%	---	---	
1,2,4-Trimethylbenzene	1560	---	72.4	ug/kg dry	50	1450	ND	108	75-123%	---	---	B
1,3,5-Trimethylbenzene	1570	---	72.4	ug/kg dry	50	1450	ND	109	73-124%	---	---	B
Vinyl chloride	1890	---	36.2	ug/kg dry	50	1450	ND	131	56-135%	---	---	Q-54l
m,p-Xylene	3030	---	72.4	ug/kg dry	50	2890	ND	105	77-124%	---	---	B
o-Xylene	1610	---	36.2	ug/kg dry	50	1450	ND	112	77-123%	---	---	B
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Blank (0120647-BLK1)			Prepared: 12/17/20 09:00 Analyzed: 12/17/20 12:36									
5035A/8260D												
Acetone	ND	---	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Blank (0120647-BLK1)			Prepared: 12/17/20 09:00 Analyzed: 12/17/20 12:36									
1,2-Dichloropropane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	EST
1,2,3-Trichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 103 %* *Limits: 80-120 %* *Dilution: 1x*

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Blank (0120647-BLK1)			Prepared: 12/17/20 09:00 Analyzed: 12/17/20 12:36									
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*				*"*				
LCS (0120647-BS1)			Prepared: 12/17/20 09:00 Analyzed: 12/17/20 11:41									
5035A/8260D												
Acetone	2050	---	1000	ug/kg wet	50	2000	---	103	80-120%	---	---	
Acrylonitrile	939	---	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
Benzene	1000	---	10.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Bromobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Bromochloromethane	1010	---	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Bromodichloromethane	1230	---	50.0	ug/kg wet	50	1000	---	**123**	**80-120%**	---	---	Q-56
Bromoform	1210	---	100	ug/kg wet	50	1000	---	**121**	**80-120%**	---	---	Q-56
Bromomethane	1070	---	500	ug/kg wet	50	1000	---	107	80-120%	---	---	
2-Butanone (MEK)	1860	---	500	ug/kg wet	50	2000	---	93	80-120%	---	---	
n-Butylbenzene	971	---	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
sec-Butylbenzene	1010	---	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
tert-Butylbenzene	976	---	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Carbon disulfide	926	---	500	ug/kg wet	50	1000	---	93	80-120%	---	---	
Carbon tetrachloride	1270	---	50.0	ug/kg wet	50	1000	---	**127**	**80-120%**	---	---	Q-56
Chlorobenzene	1010	---	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Chloroethane	1130	---	500	ug/kg wet	50	1000	---	113	80-120%	---	---	
Chloroform	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Chloromethane	697	---	250	ug/kg wet	50	1000	---	**70**	**80-120%**	---	---	Q-55
2-Chlorotoluene	996	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Chlorotoluene	1010	---	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Dibromochloromethane	1120	---	100	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2-Dibromo-3-chloropropane	1040	---	250	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,2-Dibromoethane (EDB)	1070	---	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Dibromomethane	1110	---	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,2-Dichlorobenzene	1040	---	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1070	---	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,4-Dichlorobenzene	1000	---	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Dichlorodifluoromethane	867	---	100	ug/kg wet	50	1000	---	87	80-120%	---	---	E-05
1,1-Dichloroethane	971	---	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
LCS (0120647-BS1)			Prepared: 12/17/20 09:00 Analyzed: 12/17/20 11:41									
1,2-Dichloroethane (EDC)	1030	---	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1-Dichloroethene	791	---	25.0	ug/kg wet	50	1000	---	**79**	**80-120%**	---	---	Q-55
cis-1,2-Dichloroethene	1020	---	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	994	---	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2-Dichloropropane	979	---	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,3-Dichloropropane	972	---	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
2,2-Dichloropropane	1550	---	50.0	ug/kg wet	50	1000	---	**155**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	996	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
cis-1,3-Dichloropropene	1030	---	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
trans-1,3-Dichloropropene	1100	---	100	ug/kg wet	50	1000	---	110	80-120%	---	---	
Ethylbenzene	1030	---	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Hexachlorobutadiene	1160	---	100	ug/kg wet	50	1000	---	116	80-120%	---	---	
2-Hexanone	1610	---	500	ug/kg wet	50	2000	---	81	80-120%	---	---	
Isopropylbenzene	1050	---	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
4-Isopropyltoluene	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Methylene chloride	928	---	500	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1780	---	500	ug/kg wet	50	2000	---	89	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1030	---	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Naphthalene	849	---	100	ug/kg wet	50	1000	---	85	80-120%	---	---	
n-Propylbenzene	935	---	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Styrene	1090	---	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1150	---	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
1,1,2,2-Tetrachloroethane	993	---	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Tetrachloroethene (PCE)	1110	---	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Toluene	943	---	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2,3-Trichlorobenzene	1050	---	250	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2,4-Trichlorobenzene	975	---	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,1,1-Trichloroethane	1190	---	25.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
1,1,2-Trichloroethane	1070	---	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Trichloroethene (TCE)	1050	---	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Trichlorofluoromethane	1090	---	100	ug/kg wet	50	1000	---	109	80-120%	---	---	EST
1,2,3-Trichloropropane	1040	---	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,2,4-Trimethylbenzene	1040	---	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,3,5-Trimethylbenzene	1050	---	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
LCS (0120647-BS1)			Prepared: 12/17/20 09:00 Analyzed: 12/17/20 11:41									
Vinyl chloride	822	---	25.0	ug/kg wet	50	1000	---	82	80-120%	---	---	
m,p-Xylene	2110	---	50.0	ug/kg wet	50	2000	---	105	80-120%	---	---	
o-Xylene	1020	---	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*96 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*				*"*			
Duplicate (0120647-DUP1)			Prepared: 12/14/20 10:32 Analyzed: 12/17/20 21:42									
QC Source Sample: Non-SDG (A0L0492-01)												
Acetone	ND	---	1370	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	342	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	13.7	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	342	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	342	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Duplicate (0120647-DUP1)			Prepared: 12/14/20 10:32 Analyzed: 12/17/20 21:42									
QC Source Sample: Non-SDG (A0L0492-01)												
1,3-Dichlorobenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	685	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	342	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	342	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Duplicate (0120647-DUP1)			Prepared: 12/14/20 10:32 Analyzed: 12/17/20 21:42									
QC Source Sample: Non-SDG (A0L0492-01)												
Trichloroethene (TCE)	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	137	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				
Matrix Spike (0120647-MS1)			Prepared: 12/16/20 13:20 Analyzed: 12/17/20 22:37									**V-15**
QC Source Sample: Non-SDG (A0L0571-01)												
5035A/8260D												
Acetone	2800	---	1510	ug/kg dry	50	3020	ND	93	36-164%	---	---	
Acrylonitrile	1470	---	377	ug/kg dry	50	1510	ND	97	65-134%	---	---	
Benzene	1550	---	15.1	ug/kg dry	50	1510	ND	103	77-121%	---	---	
Bromobenzene	1570	---	37.7	ug/kg dry	50	1510	ND	104	78-121%	---	---	
Bromochloromethane	1550	---	75.4	ug/kg dry	50	1510	ND	103	78-125%	---	---	
Bromodichloromethane	1780	---	75.4	ug/kg dry	50	1510	ND	118	75-127%	---	---	
Bromoform	1630	---	151	ug/kg dry	50	1510	ND	108	67-132%	---	---	
Bromomethane	1660	---	754	ug/kg dry	50	1510	ND	110	53-143%	---	---	
2-Butanone (MEK)	2690	---	754	ug/kg dry	50	3020	ND	89	51-148%	---	---	
n-Butylbenzene	1400	---	75.4	ug/kg dry	50	1510	ND	93	70-128%	---	---	
sec-Butylbenzene	1490	---	75.4	ug/kg dry	50	1510	ND	99	73-126%	---	---	
tert-Butylbenzene	1350	---	75.4	ug/kg dry	50	1510	ND	89	73-125%	---	---	
Carbon disulfide	1970	---	754	ug/kg dry	50	1510	ND	130	63-132%	---	---	
Carbon tetrachloride	1790	---	75.4	ug/kg dry	50	1510	ND	119	70-135%	---	---	
Chlorobenzene	1510	---	37.7	ug/kg dry	50	1510	ND	100	79-120%	---	---	
Chloroethane	1450	---	754	ug/kg dry	50	1510	ND	96	59-139%	---	---	
Chloroform	1570	---	75.4	ug/kg dry	50	1510	ND	104	78-123%	---	---	
Chloromethane	1240	---	377	ug/kg dry	50	1510	ND	82	50-136%	---	---	

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Darrell Auvil, Project Manager

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Matrix Spike (0120647-MS1)			Prepared: 12/16/20 13:20		Analyzed: 12/17/20 22:37							**V-15**
QC Source Sample: Non-SDG (A0L0571-01)												
2-Chlorotoluene	1500	---	75.4	ug/kg dry	50	1510	ND	99	75-122%	---	---	
4-Chlorotoluene	1490	---	75.4	ug/kg dry	50	1510	ND	99	72-124%	---	---	
Dibromochloromethane	1560	---	151	ug/kg dry	50	1510	ND	103	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1420	---	377	ug/kg dry	50	1510	ND	94	61-132%	---	---	
1,2-Dibromoethane (EDB)	1600	---	75.4	ug/kg dry	50	1510	ND	106	78-122%	---	---	
Dibromomethane	1640	---	75.4	ug/kg dry	50	1510	ND	108	78-125%	---	---	
1,2-Dichlorobenzene	1550	---	37.7	ug/kg dry	50	1510	ND	103	78-121%	---	---	
1,3-Dichlorobenzene	1580	---	37.7	ug/kg dry	50	1510	ND	105	77-121%	---	---	
1,4-Dichlorobenzene	1460	---	37.7	ug/kg dry	50	1510	ND	97	75-120%	---	---	
Dichlorodifluoromethane	1340	---	151	ug/kg dry	50	1510	ND	89	29-149%	---	---	E-05
1,1-Dichloroethane	1580	---	37.7	ug/kg dry	50	1510	ND	105	76-125%	---	---	
1,2-Dichloroethane (EDC)	1440	---	37.7	ug/kg dry	50	1510	ND	96	73-128%	---	---	
1,1-Dichloroethene	1570	---	37.7	ug/kg dry	50	1510	ND	104	70-131%	---	---	
cis-1,2-Dichloroethene	1600	---	37.7	ug/kg dry	50	1510	ND	106	77-123%	---	---	
trans-1,2-Dichloroethene	1530	---	37.7	ug/kg dry	50	1510	ND	101	74-125%	---	---	
1,2-Dichloropropane	1540	---	37.7	ug/kg dry	50	1510	ND	102	76-123%	---	---	
1,3-Dichloropropane	1460	---	75.4	ug/kg dry	50	1510	ND	97	77-121%	---	---	
2,2-Dichloropropane	1730	---	75.4	ug/kg dry	50	1510	ND	115	67-133%	---	---	
1,1-Dichloropropene	1500	---	75.4	ug/kg dry	50	1510	ND	100	76-125%	---	---	
cis-1,3-Dichloropropene	1480	---	75.4	ug/kg dry	50	1510	ND	98	74-126%	---	---	
trans-1,3-Dichloropropene	1510	---	151	ug/kg dry	50	1510	ND	100	71-130%	---	---	
Ethylbenzene	1530	---	37.7	ug/kg dry	50	1510	ND	101	76-122%	---	---	
Hexachlorobutadiene	1570	---	151	ug/kg dry	50	1510	ND	104	61-135%	---	---	
2-Hexanone	2440	---	754	ug/kg dry	50	3020	ND	81	53-145%	---	---	
Isopropylbenzene	1540	---	75.4	ug/kg dry	50	1510	ND	102	68-134%	---	---	
4-Isopropyltoluene	1460	---	75.4	ug/kg dry	50	1510	ND	96	73-127%	---	---	
Methylene chloride	1510	---	754	ug/kg dry	50	1510	ND	100	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2620	---	754	ug/kg dry	50	3020	ND	87	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1580	---	75.4	ug/kg dry	50	1510	ND	104	73-125%	---	---	
Naphthalene	1250	---	151	ug/kg dry	50	1510	ND	82	62-129%	---	---	
n-Propylbenzene	1380	---	37.7	ug/kg dry	50	1510	ND	92	73-125%	---	---	
Styrene	1560	---	75.4	ug/kg dry	50	1510	ND	104	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1620	---	75.4	ug/kg dry	50	1510	ND	108	78-125%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120647 - EPA 5035A							**Soil**					
Matrix Spike (0120647-MS1)			Prepared: 12/16/20 13:20		Analyzed: 12/17/20 22:37							**V-15**
QC Source Sample: Non-SDG (A0L0571-01)												
1,1,2,2-Tetrachloroethane	1510	---	75.4	ug/kg dry	50	1510	ND	100	70-124%	---	---	
Tetrachloroethene (PCE)	1590	---	37.7	ug/kg dry	50	1510	ND	105	73-128%	---	---	
Toluene	1440	---	75.4	ug/kg dry	50	1510	ND	95	77-121%	---	---	
1,2,3-Trichlorobenzene	1490	---	377	ug/kg dry	50	1510	ND	99	66-130%	---	---	
1,2,4-Trichlorobenzene	1390	---	377	ug/kg dry	50	1510	ND	92	67-129%	---	---	
1,1,1-Trichloroethane	1680	---	37.7	ug/kg dry	50	1510	ND	112	73-130%	---	---	
1,1,2-Trichloroethane	1600	---	37.7	ug/kg dry	50	1510	ND	106	78-121%	---	---	
Trichloroethene (TCE)	1680	---	37.7	ug/kg dry	50	1510	ND	111	77-123%	---	---	
Trichlorofluoromethane	1580	---	151	ug/kg dry	50	1510	ND	105	62-140%	---	---	EST
1,2,3-Trichloropropane	1470	---	75.4	ug/kg dry	50	1510	ND	98	73-125%	---	---	
1,2,4-Trimethylbenzene	1490	---	75.4	ug/kg dry	50	1510	ND	99	75-123%	---	---	
1,3,5-Trimethylbenzene	1550	---	75.4	ug/kg dry	50	1510	ND	102	73-124%	---	---	
Vinyl chloride	1570	---	37.7	ug/kg dry	50	1510	ND	104	56-135%	---	---	
m,p-Xylene	3070	---	75.4	ug/kg dry	50	3020	ND	102	77-124%	---	---	
o-Xylene	1490	---	37.7	ug/kg dry	50	1510	ND	99	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*			*"*				

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Blank (0120740-BLK1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 17:53									
5035A/8260D												
Acetone	ND	---	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Blank (0120740-BLK1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 17:53									
1,2-Dichloropropane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	EST
1,2,3-Trichloropropane	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 105 %* *Limits: 80-120 %* *Dilution: 1x*

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Blank (0120740-BLK1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 17:53									
Surr: Toluene-d8 (Surr)			*Recovery: 96 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*				*"*				
LCS (0120740-BS1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 16:58									
5035A/8260D												
Acetone	1750	---	1000	ug/kg wet	50	2000	---	87	80-120%	---	---	
Acrylonitrile	932	---	250	ug/kg wet	50	1000	---	93	80-120%	---	---	
Benzene	963	---	10.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Bromobenzene	1060	---	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Bromochloromethane	933	---	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Bromodichloromethane	1180	---	50.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
Bromoform	1160	---	100	ug/kg wet	50	1000	---	116	80-120%	---	---	
Bromomethane	1070	---	500	ug/kg wet	50	1000	---	107	80-120%	---	---	
2-Butanone (MEK)	1660	---	500	ug/kg wet	50	2000	---	83	80-120%	---	---	
n-Butylbenzene	918	---	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
sec-Butylbenzene	981	---	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
tert-Butylbenzene	899	---	50.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
Carbon disulfide	1310	---	500	ug/kg wet	50	1000	---	**131**	**80-120%**	---	---	Q-56
Carbon tetrachloride	1240	---	50.0	ug/kg wet	50	1000	---	**124**	**80-120%**	---	---	Q-56
Chlorobenzene	967	---	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Chloroethane	1030	---	500	ug/kg wet	50	1000	---	103	80-120%	---	---	
Chloroform	1010	---	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Chloromethane	772	---	250	ug/kg wet	50	1000	---	**77**	**80-120%**	---	---	Q-55
2-Chlorotoluene	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
4-Chlorotoluene	960	---	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Dibromochloromethane	1060	---	100	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2-Dibromo-3-chloropropane	1030	---	250	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2-Dibromoethane (EDB)	1050	---	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Dibromomethane	1080	---	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,2-Dichlorobenzene	1040	---	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1070	---	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,4-Dichlorobenzene	969	---	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Dichlorodifluoromethane	1060	---	100	ug/kg wet	50	1000	---	106	80-120%	---	---	E-05
1,1-Dichloroethane	948	---	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
LCS (0120740-BS1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 16:58									
1,2-Dichloroethane (EDC)	944	---	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,1-Dichloroethene	1050	---	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
cis-1,2-Dichloroethene	989	---	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
trans-1,2-Dichloroethene	958	---	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2-Dichloropropane	918	---	25.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,3-Dichloropropane	928	---	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
2,2-Dichloropropane	1500	---	50.0	ug/kg wet	50	1000	---	**150**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	963	---	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
cis-1,3-Dichloropropene	974	---	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
trans-1,3-Dichloropropene	1020	---	100	ug/kg wet	50	1000	---	102	80-120%	---	---	
Ethylbenzene	971	---	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Hexachlorobutadiene	1110	---	100	ug/kg wet	50	1000	---	111	80-120%	---	---	
2-Hexanone	1430	---	500	ug/kg wet	50	2000	---	**72**	**80-120%**	---	---	Q-55
Isopropylbenzene	996	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Isopropyltoluene	987	---	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Methylene chloride	927	---	500	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1560	---	500	ug/kg wet	50	2000	---	**78**	**80-120%**	---	---	Q-55
Methyl tert-butyl ether (MTBE)	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Naphthalene	846	---	100	ug/kg wet	50	1000	---	85	80-120%	---	---	
n-Propylbenzene	891	---	25.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
Styrene	1000	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1100	---	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,1,2,2-Tetrachloroethane	938	---	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Tetrachloroethene (PCE)	1110	---	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Toluene	894	---	50.0	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,2,3-Trichlorobenzene	1050	---	250	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2,4-Trichlorobenzene	985	---	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,1,1-Trichloroethane	1140	---	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
1,1,2-Trichloroethane	1040	---	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Trichloroethene (TCE)	1110	---	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Trichlorofluoromethane	1020	---	100	ug/kg wet	50	1000	---	102	80-120%	---	---	EST
1,2,3-Trichloropropane	986	---	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,2,4-Trimethylbenzene	1000	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,3,5-Trimethylbenzene	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
LCS (0120740-BS1)			Prepared: 12/19/20 09:00 Analyzed: 12/19/20 16:58									
Vinyl chloride	982	---	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
m,p-Xylene	1970	---	50.0	ug/kg wet	50	2000	---	99	80-120%	---	---	
o-Xylene	955	---	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*79-120 %*			*"*				
Duplicate (0120740-DUP1)			Prepared: 12/07/20 11:23 Analyzed: 12/19/20 21:58									
QC Source Sample: Non-SDG (A0L0292-08)												
Acetone	ND	---	1660	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	414	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	16.6	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	414	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	414	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Duplicate (0120740-DUP1)			Prepared: 12/07/20 11:23 Analyzed: 12/19/20 21:58									
QC Source Sample: Non-SDG (A0L0292-08)												
1,3-Dichlorobenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	828	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	414	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	414	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Duplicate (0120740-DUP1)			Prepared: 12/07/20 11:23 Analyzed: 12/19/20 21:58									
QC Source Sample: Non-SDG (A0L0292-08)												
Trichloroethene (TCE)	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	166	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	82.8	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	41.4	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 97 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*96 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*			*"*					
Duplicate (0120740-DUP2)			Prepared: 12/07/20 12:20 Analyzed: 12/19/20 22:53									
QC Source Sample: Non-SDG (A0L0292-16)												
Acetone	ND	---	1620	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	405	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	16.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	405	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Duplicate (0120740-DUP2)			Prepared: 12/07/20 12:20 Analyzed: 12/19/20 22:53									
QC Source Sample: Non-SDG (A0L0292-16)												
4-Chlorotoluene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	405	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	811	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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Tigard, OR 97223
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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Duplicate (0120740-DUP2)			Prepared: 12/07/20 12:20 Analyzed: 12/19/20 22:53									
QC Source Sample: Non-SDG (A0L0292-16)												
Tetrachloroethene (PCE)	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	405	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	405	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	162	ug/kg dry	50	---	ND	---	---	---	30%	EST
1,2,3-Trichloropropane	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	81.1	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	40.5	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 97 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				
Matrix Spike (0120740-MS1)			Prepared: 12/07/20 12:20 Analyzed: 12/20/20 03:52									**V-15**
QC Source Sample: Non-SDG (A0L0736-04)												
5035A/8260D												
Acetone	1730	---	1060	ug/kg dry	50	2110	ND	82	36-164%	---	---	
Acrylonitrile	747	---	264	ug/kg dry	50	1060	ND	71	65-134%	---	---	
Benzene	809	---	10.6	ug/kg dry	50	1060	ND	**76**	**77-121%**	---	---	Q-01
Bromobenzene	1050	---	26.4	ug/kg dry	50	1060	ND	99	78-121%	---	---	
Bromochloromethane	1010	---	52.8	ug/kg dry	50	1060	ND	95	78-125%	---	---	
Bromodichloromethane	1170	---	52.8	ug/kg dry	50	1060	ND	111	75-127%	---	---	
Bromoform	1380	---	106	ug/kg dry	50	1060	ND	131	67-132%	---	---	
Bromomethane	1230	---	528	ug/kg dry	50	1060	ND	116	53-143%	---	---	
2-Butanone (MEK)	1790	---	528	ug/kg dry	50	2110	ND	85	51-148%	---	---	
n-Butylbenzene	823	---	52.8	ug/kg dry	50	1060	ND	78	70-128%	---	---	
sec-Butylbenzene	903	---	52.8	ug/kg dry	50	1060	ND	85	73-126%	---	---	
tert-Butylbenzene	903	---	52.8	ug/kg dry	50	1060	ND	85	73-125%	---	---	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Matrix Spike (0120740-MS1)			Prepared: 12/07/20 12:20		Analyzed: 12/20/20 03:52							**V-15**
QC Source Sample: Non-SDG (A0L0736-04)												
Carbon disulfide	1420	---	528	ug/kg dry	50	1060	ND	**134**	**63-132%**	---	---	Q-54a
Carbon tetrachloride	1500	---	52.8	ug/kg dry	50	1060	ND	**142**	**70-135%**	---	---	Q-54j
Chlorobenzene	1030	---	26.4	ug/kg dry	50	1060	ND	97	79-120%	---	---	
Chloroethane	1660	---	528	ug/kg dry	50	1060	ND	**157**	**59-139%**	---	---	Q-01
Chloroform	1160	---	52.8	ug/kg dry	50	1060	ND	110	78-123%	---	---	
Chloromethane	589	---	264	ug/kg dry	50	1060	ND	56	50-136%	---	---	Q-54o
2-Chlorotoluene	924	---	52.8	ug/kg dry	50	1060	ND	87	75-122%	---	---	
4-Chlorotoluene	924	---	52.8	ug/kg dry	50	1060	ND	87	72-124%	---	---	
Dibromochloromethane	1240	---	106	ug/kg dry	50	1060	ND	117	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1030	---	264	ug/kg dry	50	1060	ND	97	61-132%	---	---	
1,2-Dibromoethane (EDB)	1090	---	52.8	ug/kg dry	50	1060	ND	103	78-122%	---	---	
Dibromomethane	1010	---	52.8	ug/kg dry	50	1060	ND	95	78-125%	---	---	
1,2-Dichlorobenzene	1020	---	26.4	ug/kg dry	50	1060	ND	96	78-121%	---	---	
1,3-Dichlorobenzene	1050	---	26.4	ug/kg dry	50	1060	ND	100	77-121%	---	---	
1,4-Dichlorobenzene	965	---	26.4	ug/kg dry	50	1060	ND	91	75-120%	---	---	
Dichlorodifluoromethane	1030	---	106	ug/kg dry	50	1060	ND	97	29-149%	---	---	E-05
1,1-Dichloroethane	1070	---	26.4	ug/kg dry	50	1060	ND	101	76-125%	---	---	
1,2-Dichloroethane (EDC)	1030	---	26.4	ug/kg dry	50	1060	ND	97	73-128%	---	---	
1,1-Dichloroethene	1180	---	26.4	ug/kg dry	50	1060	ND	111	70-131%	---	---	
cis-1,2-Dichloroethene	1090	---	26.4	ug/kg dry	50	1060	ND	103	77-123%	---	---	
trans-1,2-Dichloroethene	1020	---	26.4	ug/kg dry	50	1060	ND	96	74-125%	---	---	
1,2-Dichloropropane	721	---	26.4	ug/kg dry	50	1060	ND	**68**	**76-123%**	---	---	Q-01
1,3-Dichloropropane	926	---	52.8	ug/kg dry	50	1060	ND	88	77-121%	---	---	
2,2-Dichloropropane	1260	---	52.8	ug/kg dry	50	1060	ND	119	67-133%	---	---	Q-54g
1,1-Dichloropropene	1000	---	52.8	ug/kg dry	50	1060	ND	95	76-125%	---	---	
cis-1,3-Dichloropropene	922	---	52.8	ug/kg dry	50	1060	ND	87	74-126%	---	---	
trans-1,3-Dichloropropene	1050	---	106	ug/kg dry	50	1060	ND	99	71-130%	---	---	
Ethylbenzene	1030	---	26.4	ug/kg dry	50	1060	ND	97	76-122%	---	---	
Hexachlorobutadiene	1190	---	106	ug/kg dry	50	1060	ND	112	61-135%	---	---	
2-Hexanone	1510	---	528	ug/kg dry	50	2110	ND	72	53-145%	---	---	Q-54p
Isopropylbenzene	1080	---	52.8	ug/kg dry	50	1060	ND	103	68-134%	---	---	
4-Isopropyltoluene	935	---	52.8	ug/kg dry	50	1060	ND	88	73-127%	---	---	
Methylene chloride	1020	---	528	ug/kg dry	50	1060	ND	96	70-128%	---	---	

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120740 - EPA 5035A							**Soil**					
Matrix Spike (0120740-MS1)			Prepared: 12/07/20 12:20		Analyzed: 12/20/20 03:52							**V-15**
QC Source Sample: Non-SDG (A0L0736-04)												
4-Methyl-2-pentanone (MiBK)	1610	---	528	ug/kg dry	50	2110	ND	76	65-135%	---	---	Q-54m
Methyl tert-butyl ether (MTBE)	1090	---	52.8	ug/kg dry	50	1060	ND	103	73-125%	---	---	
Naphthalene	778	---	106	ug/kg dry	50	1060	ND	74	62-129%	---	---	
n-Propylbenzene	807	---	26.4	ug/kg dry	50	1060	ND	76	73-125%	---	---	
Styrene	1100	---	52.8	ug/kg dry	50	1060	ND	104	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1290	---	52.8	ug/kg dry	50	1060	ND	122	78-125%	---	---	
1,1,2,2-Tetrachloroethane	811	---	52.8	ug/kg dry	50	1060	ND	77	70-124%	---	---	
Tetrachloroethene (PCE)	1220	---	26.4	ug/kg dry	50	1060	ND	115	73-128%	---	---	
Toluene	913	---	52.8	ug/kg dry	50	1060	ND	86	77-121%	---	---	
1,2,3-Trichlorobenzene	1030	---	264	ug/kg dry	50	1060	ND	98	66-130%	---	---	
1,2,4-Trichlorobenzene	954	---	264	ug/kg dry	50	1060	ND	90	67-129%	---	---	
1,1,1-Trichloroethane	1370	---	26.4	ug/kg dry	50	1060	ND	129	73-130%	---	---	
1,1,2-Trichloroethane	1040	---	26.4	ug/kg dry	50	1060	ND	98	78-121%	---	---	
Trichloroethene (TCE)	1060	---	26.4	ug/kg dry	50	1060	114	89	77-123%	---	---	
Trichlorofluoromethane	2960	---	106	ug/kg dry	50	1060	ND	**280**	**62-140%**	---	---	EST
1,2,3-Trichloropropane	1030	---	52.8	ug/kg dry	50	1060	ND	97	73-125%	---	---	
1,2,4-Trimethylbenzene	970	---	52.8	ug/kg dry	50	1060	ND	92	75-123%	---	---	
1,3,5-Trimethylbenzene	988	---	52.8	ug/kg dry	50	1060	ND	93	73-124%	---	---	
Vinyl chloride	914	---	26.4	ug/kg dry	50	1060	ND	86	56-135%	---	---	
m,p-Xylene	2170	---	52.8	ug/kg dry	50	2110	ND	103	77-124%	---	---	
o-Xylene	1050	---	26.4	ug/kg dry	50	1060	ND	99	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 90 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*93 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*				*"*			

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120889 - EPA 3546							**Soil**					
Blank (0120889-BLK1)			Prepared: 12/28/20 07:02		Analyzed: 12/29/20 10:32							**C-07**
EPA 8082A												
Aroclor 1016	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	---	9.09	ug/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 99 %*		*Limits: 60-125 %*			*Dilution: 1x*				
LCS (0120889-BS1)			Prepared: 12/28/20 07:02		Analyzed: 12/29/20 10:50							**C-07**
EPA 8082A												
Aroclor 1016	232	---	10.0	ug/kg wet	1	250	---	93	47-134%	---	---	
Aroclor 1260	266	---	10.0	ug/kg wet	1	250	---	106	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 108 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Duplicate (0120889-DUP1)			Prepared: 12/28/20 07:02		Analyzed: 12/29/20 11:43							**C-07**
QC Source Sample: C001 (A0L0287-42)												
EPA 8082A												
Aroclor 1016	ND	---	11.6	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	11.6	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	29.6	ug/kg dry	1	---	ND	---	---	---	30%	R-02
Aroclor 1242	ND	---	11.6	ug/kg dry	1	---	8.49	---	---	***	**30%**	Q-05
Aroclor 1248	ND	---	11.6	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	**13.2**	---	11.6	ug/kg dry	1	---	17.2	---	---	26	30%	P-12
Aroclor 1260	ND	---	11.6	ug/kg dry	1	---	13.2	---	---	***	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 93 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Matrix Spike (0120889-MS1)			Prepared: 12/28/20 07:02		Analyzed: 12/29/20 12:53							**C-07**
QC Source Sample: C004 (A0L0287-45)												
EPA 8082A												
Aroclor 1016	198	---	11.7	ug/kg dry	1	292	ND	68	47-134%	---	---	
Aroclor 1260	221	---	11.7	ug/kg dry	1	292	6.46	73	53-140%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120889 - EPA 3546							**Soil**					
Matrix Spike (0120889-MS1)			Prepared: 12/28/20 07:02 Analyzed: 12/29/20 12:53									**C-07**
QC Source Sample: C004 (A0L0287-45)												
Surr: Decachlorobiphenyl (Surr)			*Recovery: 81 %*	*Limits: 60-125 %*			*Dilution: 1x*					

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QUALITY CONTROL (QC) SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120466 - EPA 3546/3640A (GPC)							**Soil**					
Blank (0120466-BLK1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 14:26							**C-05**
EPA 8081B												
Aldrin	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
alpha-BHC	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
beta-BHC	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
delta-BHC	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
gamma-BHC (Lindane)	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
cis-Chlordane	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
trans-Chlordane	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
4,4'-DDD	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
4,4'-DDE	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
4,4'-DDT	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Dieldrin	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Endosulfan I	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Endosulfan II	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Endosulfan sulfate	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Endrin	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Endrin Aldehyde	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Endrin ketone	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Heptachlor	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Heptachlor epoxide	ND	---	1.82	ug/kg wet	1	---	---	---	---	---	---	
Methoxychlor	ND	---	5.45	ug/kg wet	1	---	---	---	---	---	---	
Chlordane (Technical)	ND	---	54.5	ug/kg wet	1	---	---	---	---	---	---	
Toxaphene (Total)	ND	---	54.5	ug/kg wet	1	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 59 %*		*Limits: 42-129 %*			*Dilution: 1x*				
Decachlorobiphenyl (Surr)			*94 %*		*55-130 %*			*"*				
LCS (0120466-BS1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 14:43							**C-05**
EPA 8081B												
Aldrin	30.7	---	2.00	ug/kg wet	1	50.0	---	61	45-136%	---	---	
alpha-BHC	33.7	---	2.00	ug/kg wet	1	50.0	---	67	45-137%	---	---	
beta-BHC	32.9	---	2.00	ug/kg wet	1	50.0	---	66	50-136%	---	---	
delta-BHC	33.4	---	2.00	ug/kg wet	1	50.0	---	67	47-139%	---	---	
gamma-BHC (Lindane)	35.0	---	2.00	ug/kg wet	1	50.0	---	70	49-135%	---	---	
cis-Chlordane	35.6	---	2.00	ug/kg wet	1	50.0	---	71	54-133%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120466 - EPA 3546/3640A (GPC)							**Soil**					
LCS (0120466-BS1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 14:43							**C-05**
trans-Chlordane	34.3	---	2.00	ug/kg wet	1	50.0	---	69	53-135%	---	---	
4,4'-DDD	42.4	---	2.00	ug/kg wet	1	50.0	---	85	56-139%	---	---	
4,4'-DDE	37.4	---	2.00	ug/kg wet	1	50.0	---	75	56-134%	---	---	
Dieldrin	44.0	---	2.00	ug/kg wet	1	50.0	---	88	56-136%	---	---	
Endosulfan I	39.3	---	2.00	ug/kg wet	1	50.0	---	79	53-132%	---	---	
Endosulfan II	44.9	---	2.00	ug/kg wet	1	50.0	---	90	53-134%	---	---	
Endosulfan sulfate	48.9	---	2.00	ug/kg wet	1	50.0	---	98	55-136%	---	---	
Endrin	53.3	---	2.00	ug/kg wet	1	50.0	---	107	57-140%	---	---	Q-41
Endrin Aldehyde	36.3	---	2.00	ug/kg wet	1	50.0	---	73	35-137%	---	---	
Endrin ketone	41.5	---	2.00	ug/kg wet	1	50.0	---	83	55-136%	---	---	Q-31
Heptachlor	35.1	---	2.00	ug/kg wet	1	50.0	---	70	47-136%	---	---	
Heptachlor epoxide	37.8	---	2.00	ug/kg wet	1	50.0	---	76	52-136%	---	---	
Methoxychlor	49.3	---	6.00	ug/kg wet	1	50.0	---	99	52-143%	---	---	Q-31
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 54 %*		*Limits: 42-129 %*				*Dilution: 1x*			
Decachlorobiphenyl (Surr)			*94 %*		*55-130 %*				*"*			
LCS (0120466-BS2)			Prepared: 12/15/20 18:12		Analyzed: 12/15/20 18:12							**C-05**
EPA 8081B												
4,4'-DDT	50.7	---	2.00	ug/kg wet	1	50.0	---	101	50-141%	---	---	
Duplicate (0120466-DUP1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 15:17							**C-05**
QC Source Sample: Non-SDG (A0L0062-03RE3)												
Aldrin	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
alpha-BHC	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
beta-BHC	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
delta-BHC	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
gamma-BHC (Lindane)	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
cis-Chlordane	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
trans-Chlordane	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
4,4'-DDD	**15.3**	---	1.96	ug/kg wet	1	---	13.3	---	---	14	30%	
4,4'-DDE	**28.4**	---	1.96	ug/kg wet	1	---	24.4	---	---	15	30%	
4,4'-DDT	ND	---	1.96	ug/kg wet	1	---	1.74	---	---	***	30%	Q-31
Dieldrin	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Endosulfan I	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120466 - EPA 3546/3640A (GPC)							**Soil**					
Duplicate (0120466-DUP1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 15:17							**C-05**
QC Source Sample: Non-SDG (A0L0062-03RE3)												
Endosulfan II	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Endosulfan sulfate	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Endrin	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Endrin Aldehyde	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Endrin ketone	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Heptachlor	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Heptachlor epoxide	ND	---	1.96	ug/kg wet	1	---	ND	---	---	---	30%	
Methoxychlor	ND	---	5.88	ug/kg wet	1	---	ND	---	---	---	30%	
Chlordane (Technical)	ND	---	58.8	ug/kg wet	1	---	ND	---	---	---	30%	
Toxaphene (Total)	ND	---	58.8	ug/kg wet	1	---	ND	---	---	---	30%	
Surr: 2,4,5,6-TCMX (Surr)		*Recovery:*	*43 %*	*Limits:*	*42-129 %*		*Dilution:*	*1x*				
Decachlorobiphenyl (Surr)			*82 %*		*55-130 %*			*"*				
Matrix Spike (0120466-MS1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 15:34							**C-05**
QC Source Sample: Non-SDG (A0L0062-03RE3)												
EPA 8081B												
Aldrin	21.1	---	1.95	ug/kg wet	1	48.8	ND	**43**	**45-136%**	---	---	Q-01
alpha-BHC	19.4	---	1.95	ug/kg wet	1	48.8	ND	**40**	**45-137%**	---	---	Q-01
beta-BHC	29.4	---	1.95	ug/kg wet	1	48.8	ND	60	50-136%	---	---	
delta-BHC	27.5	---	1.95	ug/kg wet	1	48.8	ND	56	47-139%	---	---	
gamma-BHC (Lindane)	22.2	---	1.95	ug/kg wet	1	48.8	ND	**46**	**49-135%**	---	---	Q-01
cis-Chlordane	29.0	---	1.95	ug/kg wet	1	48.8	ND	60	54-133%	---	---	
trans-Chlordane	28.3	---	1.95	ug/kg wet	1	48.8	ND	58	53-135%	---	---	
4,4'-DDD	42.6	---	1.95	ug/kg wet	1	48.8	13.3	60	56-139%	---	---	
4,4'-DDE	50.5	---	1.95	ug/kg wet	1	48.8	24.4	**54**	**56-134%**	---	---	Q-01
4,4'-DDT	32.9	---	1.95	ug/kg wet	1	48.8	1.74	64	50-141%	---	---	Q-31
Dieldrin	31.6	---	1.95	ug/kg wet	1	48.8	ND	65	56-136%	---	---	
Endosulfan I	28.4	---	1.95	ug/kg wet	1	48.8	ND	58	53-132%	---	---	
Endosulfan II	32.0	---	1.95	ug/kg wet	1	48.8	ND	66	53-134%	---	---	
Endosulfan sulfate	31.8	---	1.95	ug/kg wet	1	48.8	ND	65	55-136%	---	---	
Endrin	38.1	---	1.95	ug/kg wet	1	48.8	ND	78	57-140%	---	---	Q-41
Endrin Aldehyde	24.7	---	1.95	ug/kg wet	1	48.8	ND	51	35-137%	---	---	
Endrin ketone	35.7	---	1.95	ug/kg wet	1	48.8	ND	73	55-136%	---	---	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120466 - EPA 3546/3640A (GPC)							**Soil**					
Matrix Spike (0120466-MS1)			Prepared: 12/11/20 07:09		Analyzed: 12/14/20 15:34							**C-05**
QC Source Sample: Non-SDG (A0L0062-03RE3)												
Heptachlor	22.2	---	1.95	ug/kg wet	1	48.8	ND	**46**	**47-136%**	---	---	Q-01
Heptachlor epoxide	33.6	---	1.95	ug/kg wet	1	48.8	ND	69	52-136%	---	---	Q-41
Methoxychlor	38.1	---	5.85	ug/kg wet	1	48.8	ND	78	52-143%	---	---	Q-41
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 33 %*		*Limits: 42-129 %*		*Dilution: 1x*					S-03
Decachlorobiphenyl (Surr)			*73 %*		*55-130 %*		*"*					

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
Blank (0120742-BLK2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 14:33							
EPA 8270E												
Acenaphthene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	5.00	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	5.00	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	5.00	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	---	3.75	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	---	62.5	ug/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	---	62.5	ug/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Phenol	ND	---	5.00	ug/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
Blank (0120742-BLK2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 14:33							
2,3,5,6-Tetrachlorophenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	---	37.5	ug/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	---	2.50	ug/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Aniline	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	---	50.0	ug/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	---	50.0	ug/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	---	50.0	ug/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	---	25.0	ug/kg wet	1	---	---	---	---	---	---	
Benzoic acid	ND	---	312	ug/kg wet	1	---	---	---	---	---	---	
Benzyl alcohol	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	B-02
Isophorone	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
Blank (0120742-BLK2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 14:33							
Azobenzene (1,2-DPH)	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	---	62.5	ug/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	---	50.0	ug/kg wet	1	---	---	---	---	---	---	Q-52
1,2-Dinitrobenzene	ND	---	62.5	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	---	62.5	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	---	62.5	ug/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	---	12.5	ug/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	6.25	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*83 %*	*Limits:*	*37-122 %*		*Dilution:*	*1x*				
2-Fluorobiphenyl (Surr)			*82 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*85 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*92 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*82 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*63 %*		*39-132 %*			*"*				
LCS (0120742-BS2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 15:09							**Q-18**
EPA 8270E												
Acenaphthene	479	---	5.34	ug/kg wet	2	533	---	90	40-123%	---	---	
Acenaphthylene	517	---	5.34	ug/kg wet	2	533	---	97	32-132%	---	---	
Anthracene	514	---	5.34	ug/kg wet	2	533	---	96	47-123%	---	---	
Benz(a)anthracene	512	---	5.34	ug/kg wet	2	533	---	96	49-126%	---	---	
Benzo(a)pyrene	522	---	8.00	ug/kg wet	2	533	---	98	45-129%	---	---	
Benzo(b)fluoranthene	504	---	8.00	ug/kg wet	2	533	---	95	45-132%	---	---	
Benzo(k)fluoranthene	501	---	8.00	ug/kg wet	2	533	---	94	47-132%	---	---	
Benzo(g,h,i)perylene	532	---	5.34	ug/kg wet	2	533	---	100	43-134%	---	---	
Chrysene	498	---	5.34	ug/kg wet	2	533	---	93	50-124%	---	---	
Dibenz(a,h)anthracene	504	---	5.34	ug/kg wet	2	533	---	95	45-134%	---	---	
Fluoranthene	520	---	5.34	ug/kg wet	2	533	---	97	50-127%	---	---	
Fluorene	492	---	5.34	ug/kg wet	2	533	---	92	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	496	---	5.34	ug/kg wet	2	533	---	93	45-133%	---	---	
1-Methylnaphthalene	468	---	10.7	ug/kg wet	2	533	---	88	40-120%	---	---	
2-Methylnaphthalene	476	---	10.7	ug/kg wet	2	533	---	89	38-122%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
LCS (0120742-BS2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 15:09							**Q-18**
Naphthalene	436	---	10.7	ug/kg wet	2	533	---	82	35-123%	---	---	
Phenanthrene	484	---	5.34	ug/kg wet	2	533	---	91	50-121%	---	---	
Pyrene	515	---	5.34	ug/kg wet	2	533	---	97	47-127%	---	---	
Carbazole	537	---	8.00	ug/kg wet	2	533	---	101	50-123%	---	---	
Dibenzofuran	474	---	5.34	ug/kg wet	2	533	---	89	44-120%	---	---	
2-Chlorophenol	465	---	26.6	ug/kg wet	2	533	---	87	34-121%	---	---	
4-Chloro-3-methylphenol	470	---	53.4	ug/kg wet	2	533	---	88	45-122%	---	---	
2,4-Dichlorophenol	479	---	26.6	ug/kg wet	2	533	---	90	40-122%	---	---	
2,4-Dimethylphenol	530	---	26.6	ug/kg wet	2	533	---	99	30-127%	---	---	
2,4-Dinitrophenol	451	---	133	ug/kg wet	2	533	---	85	10-137%	---	---	
4,6-Dinitro-2-methylphenol	443	---	133	ug/kg wet	2	533	---	83	29-132%	---	---	
2-Methylphenol	483	---	13.3	ug/kg wet	2	533	---	91	32-122%	---	---	
3+4-Methylphenol(s)	486	---	13.3	ug/kg wet	2	533	---	91	34-120%	---	---	
2-Nitrophenol	460	---	53.4	ug/kg wet	2	533	---	86	36-123%	---	---	
4-Nitrophenol	499	---	53.4	ug/kg wet	2	533	---	94	30-132%	---	---	
Pentachlorophenol (PCP)	525	---	53.4	ug/kg wet	2	533	---	98	25-133%	---	---	
Phenol	469	---	10.7	ug/kg wet	2	533	---	88	34-121%	---	---	
2,3,4,6-Tetrachlorophenol	483	---	26.6	ug/kg wet	2	533	---	91	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	520	---	26.6	ug/kg wet	2	533	---	98	40-120%	---	---	
2,4,5-Trichlorophenol	472	---	26.6	ug/kg wet	2	533	---	89	41-124%	---	---	
Nitrobenzene	451	---	53.4	ug/kg wet	2	533	---	85	34-122%	---	---	
2,4,6-Trichlorophenol	489	---	26.6	ug/kg wet	2	533	---	92	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	504	---	80.0	ug/kg wet	2	533	---	94	51-133%	---	---	
Butyl benzyl phthalate	546	---	53.4	ug/kg wet	2	533	---	102	48-132%	---	---	
Diethylphthalate	502	---	53.4	ug/kg wet	2	533	---	94	50-124%	---	---	
Dimethylphthalate	513	---	53.4	ug/kg wet	2	533	---	96	48-124%	---	---	
Di-n-butylphthalate	544	---	53.4	ug/kg wet	2	533	---	102	51-128%	---	---	
Di-n-octyl phthalate	530	---	53.4	ug/kg wet	2	533	---	99	45-140%	---	---	
N-Nitrosodimethylamine	435	---	13.3	ug/kg wet	2	533	---	82	23-120%	---	---	
N-Nitroso-di-n-propylamine	480	---	13.3	ug/kg wet	2	533	---	90	36-120%	---	---	
N-Nitrosodiphenylamine	520	---	13.3	ug/kg wet	2	533	---	98	38-127%	---	---	
Bis(2-Chloroethoxy) methane	460	---	13.3	ug/kg wet	2	533	---	86	36-121%	---	---	
Bis(2-Chloroethyl) ether	426	---	13.3	ug/kg wet	2	533	---	80	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	429	---	13.3	ug/kg wet	2	533	---	81	33-131%	---	---	

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
LCS (0120742-BS2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 15:09							**Q-18**
Hexachlorobenzene	486	---	5.34	ug/kg wet	2	533	---	91	45-122%	---	---	
Hexachlorobutadiene	428	---	13.3	ug/kg wet	2	533	---	80	32-123%	---	---	
Hexachlorocyclopentadiene	430	---	26.6	ug/kg wet	2	533	---	81	10-140%	---	---	
Hexachloroethane	437	---	13.3	ug/kg wet	2	533	---	82	28-120%	---	---	
2-Chloronaphthalene	452	---	5.34	ug/kg wet	2	533	---	85	41-120%	---	---	
1,2,4-Trichlorobenzene	430	---	13.3	ug/kg wet	2	533	---	81	34-120%	---	---	
4-Bromophenyl phenyl ether	499	---	13.3	ug/kg wet	2	533	---	94	46-124%	---	---	
4-Chlorophenyl phenyl ether	482	---	13.3	ug/kg wet	2	533	---	90	45-121%	---	---	
Aniline	429	---	26.6	ug/kg wet	2	533	---	80	10-120%	---	---	
4-Chloroaniline	431	---	13.3	ug/kg wet	2	533	---	81	17-120%	---	---	
2-Nitroaniline	488	---	107	ug/kg wet	2	533	---	91	44-127%	---	---	
3-Nitroaniline	457	---	107	ug/kg wet	2	533	---	86	33-120%	---	---	
4-Nitroaniline	485	---	107	ug/kg wet	2	533	---	91	70-138%	---	---	
2,4-Dinitrotoluene	486	---	53.4	ug/kg wet	2	533	---	91	48-126%	---	---	
2,6-Dinitrotoluene	460	---	53.4	ug/kg wet	2	533	---	86	46-124%	---	---	
Benzoic acid	935	---	666	ug/kg wet	2	1070	---	88	10-140%	---	---	
Benzyl alcohol	466	---	26.6	ug/kg wet	2	533	---	87	29-122%	---	---	B-02
Isophorone	520	---	13.3	ug/kg wet	2	533	---	98	30-122%	---	---	
Azobenzene (1,2-DPH)	482	---	13.3	ug/kg wet	2	533	---	90	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	512	---	133	ug/kg wet	2	533	---	96	61-121%	---	---	
3,3'-Dichlorobenzidine	1400	---	107	ug/kg wet	2	1070	---	**131**	**22-121%**	---	---	Q-29
1,2-Dinitrobenzene	478	---	133	ug/kg wet	2	533	---	90	44-120%	---	---	
1,3-Dinitrobenzene	475	---	133	ug/kg wet	2	533	---	89	43-127%	---	---	
1,4-Dinitrobenzene	466	---	133	ug/kg wet	2	533	---	87	37-132%	---	---	
Pyridine	338	---	26.6	ug/kg wet	2	533	---	63	10-120%	---	---	
1,2-Dichlorobenzene	426	---	13.3	ug/kg wet	2	533	---	80	33-120%	---	---	
1,3-Dichlorobenzene	422	---	13.3	ug/kg wet	2	533	---	79	30-120%	---	---	
1,4-Dichlorobenzene	426	---	13.3	ug/kg wet	2	533	---	80	31-120%	---	---	

Surr: Nitrobenzene-d5 (Surr)	*Recovery: 80 %*	*Limits: 37-122 %*	*Dilution: 2x*
2-Fluorobiphenyl (Surr)	*80 %*	*44-120 %*	*"*
Phenol-d6 (Surr)	*86 %*	*33-122 %*	*"*
p-Terphenyl-d14 (Surr)	*91 %*	*54-127 %*	*"*
2-Fluorophenol (Surr)	*82 %*	*35-120 %*	*"*
2,4,6-Tribromophenol (Surr)	*93 %*	*39-132 %*	*"*

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
Duplicate (0120742-DUP2)			Prepared: 12/21/20 07:03 Analyzed: 12/22/20 16:58									
QC Source Sample: C004 (A0L0287-45)												
EPA 8270E												
Acenaphthene	**7380**	---	615	ug/kg dry	200	---	6370	---	---	15	30%	
Acenaphthylene	**4880**	---	615	ug/kg dry	200	---	5490	---	---	12	30%	
Anthracene	**13700**	---	615	ug/kg dry	200	---	13700	---	---	0.3	30%	
Benz(a)anthracene	**34000**	---	615	ug/kg dry	200	---	36800	---	---	8	30%	
Benzo(a)pyrene	**43000**	---	921	ug/kg dry	200	---	46800	---	---	8	30%	
Benzo(b)fluoranthene	**41200**	---	921	ug/kg dry	200	---	43600	---	---	6	30%	
Benzo(k)fluoranthene	**13600**	---	921	ug/kg dry	200	---	17500	---	---	25	30%	M-05
Benzo(g,h,i)perylene	**25000**	---	615	ug/kg dry	200	---	27600	---	---	10	30%	
Chrysene	**37500**	---	615	ug/kg dry	200	---	41800	---	---	11	30%	
Dibenz(a,h)anthracene	**4460**	---	615	ug/kg dry	200	---	4880	---	---	9	30%	
Fluoranthene	**72300**	---	615	ug/kg dry	200	---	80200	---	---	10	30%	
Fluorene	**4960**	---	615	ug/kg dry	200	---	4320	---	---	14	30%	
Indeno(1,2,3-cd)pyrene	**23500**	---	615	ug/kg dry	200	---	26300	---	---	11	30%	
1-Methylnaphthalene	**1500**	---	1230	ug/kg dry	200	---	1180	---	---	24	30%	
2-Methylnaphthalene	**1790**	---	1230	ug/kg dry	200	---	1430	---	---	23	30%	
Naphthalene	**3760**	---	1230	ug/kg dry	200	---	3310	---	---	13	30%	
Phenanthrene	**58300**	---	615	ug/kg dry	200	---	56400	---	---	3	30%	
Pyrene	**84000**	---	615	ug/kg dry	200	---	93000	---	---	10	30%	
Carbazole	**3340**	---	921	ug/kg dry	200	---	3240	---	---	3	30%	
Dibenzofuran	**2260**	---	615	ug/kg dry	200	---	1960	---	---	14	30%	
2-Chlorophenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	---	15400	ug/kg dry	200	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	---	15400	ug/kg dry	200	---	ND	---	---	---	30%	
2-Methylphenol	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
2-Nitrophenol	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
4-Nitrophenol	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

Apex Laboratories, LLC

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
Duplicate (0120742-DUP2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 16:58							
QC Source Sample: C004 (A0L0287-45)												
Phenol	ND	---	1230	ug/kg dry	200	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
Nitrobenzene	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	---	9210	ug/kg dry	200	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
Diethylphthalate	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
Dimethylphthalate	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	---	615	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
Hexachloroethane	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	---	615	ug/kg dry	200	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Aniline	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
4-Chloroaniline	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
2-Nitroaniline	ND	---	12300	ug/kg dry	200	---	ND	---	---	---	30%	
3-Nitroaniline	ND	---	12300	ug/kg dry	200	---	ND	---	---	---	30%	
4-Nitroaniline	ND	---	12300	ug/kg dry	200	---	ND	---	---	---	30%	
2,4-Dinitrotoluene	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	---	6150	ug/kg dry	200	---	ND	---	---	---	30%	

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Darrell Auvil, Project Manager

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120742 - EPA 3546							**Soil**					
Duplicate (0120742-DUP2)			Prepared: 12/21/20 07:03		Analyzed: 12/22/20 16:58							
QC Source Sample: C004 (A0L0287-45)												
Benzoic acid	ND	---	76700	ug/kg dry	200	---	ND	---	---	---	30%	
Benzyl alcohol	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
Isophorone	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	---	15400	ug/kg dry	200	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	---	12300	ug/kg dry	200	---	ND	---	---	---	30%	Q-52
1,2-Dinitrobenzene	ND	---	15400	ug/kg dry	200	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	---	15400	ug/kg dry	200	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	---	15400	ug/kg dry	200	---	ND	---	---	---	30%	
Pyridine	ND	---	3060	ug/kg dry	200	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	1540	ug/kg dry	200	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*69 %*	*Limits:*	*37-122 %*		*Dilution:*	*200x*				S-05
2-Fluorobiphenyl (Surr)			*72 %*		*44-120 %*		*"*					S-05
Phenol-d6 (Surr)			*65 %*		*33-122 %*		*"*					S-05
p-Terphenyl-d14 (Surr)			*92 %*		*54-127 %*		*"*					S-05
2-Fluorophenol (Surr)			*66 %*		*35-120 %*		*"*					S-05
2,4,6-Tribromophenol (Surr)			*302 %*		*39-132 %*		*"*					S-05

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120478 - EPA 3051A							**Soil**					
Blank (0120478-BLK1)			Prepared: 12/14/20 09:02 Analyzed: 12/16/20 15:22									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (0120478-BS1)			Prepared: 12/14/20 09:02 Analyzed: 12/16/20 15:32									
EPA 6020B												
Arsenic	52.8	---	1.00	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Barium	50.3	---	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Cadmium	52.0	---	0.200	mg/kg wet	10	50.0	---	104	80-120%	---	---	
Chromium	50.7	---	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Lead	53.4	---	0.200	mg/kg wet	10	50.0	---	107	80-120%	---	---	
Mercury	1.03	---	0.0800	mg/kg wet	10	1.00	---	103	80-120%	---	---	
Selenium	26.4	---	1.00	mg/kg wet	10	25.0	---	106	80-120%	---	---	
Silver	26.4	---	0.200	mg/kg wet	10	25.0	---	105	80-120%	---	---	
Duplicate (0120478-DUP1)			Prepared: 12/14/20 09:02 Analyzed: 12/16/20 16:11									
QC Source Sample: Non-SDG (A0L0222-01)												
Arsenic	**8.38**	---	1.21	mg/kg dry	10	---	6.60	---	---	**24**	**20%**	Q-04
Barium	**161**	---	1.21	mg/kg dry	10	---	135	---	---	18	20%	
Cadmium	ND	---	0.241	mg/kg dry	10	---	0.171	---	---	***	**20%**	Q-05
Chromium	**21.7**	---	1.21	mg/kg dry	10	---	18.5	---	---	16	20%	
Lead	**44.4**	---	0.241	mg/kg dry	10	---	34.1	---	---	**26**	**20%**	Q-04
Mercury	ND	---	0.0966	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1.21	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.241	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (0120478-MS1)			Prepared: 12/14/20 09:02 Analyzed: 12/16/20 16:16									

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Darrell Auvil, Project Manager

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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120478 - EPA 3051A							**Soil**					
Matrix Spike (0120478-MS1)			Prepared: 12/14/20 09:02		Analyzed: 12/16/20 16:16							
QC Source Sample: Non-SDG (A0L0222-01)												
EPA 6020B												
Arsenic	69.9	---	1.23	mg/kg dry	10	61.6	6.60	103	75-125%	---	---	
Barium	204	---	1.23	mg/kg dry	10	61.6	135	113	75-125%	---	---	
Cadmium	63.4	---	0.246	mg/kg dry	10	61.6	0.171	103	75-125%	---	---	
Chromium	81.7	---	1.23	mg/kg dry	10	61.6	18.5	103	75-125%	---	---	
Lead	92.7	---	0.246	mg/kg dry	10	61.6	34.1	95	75-125%	---	---	
Mercury	1.27	---	0.0985	mg/kg dry	10	1.23	ND	103	75-125%	---	---	
Selenium	29.1	---	1.23	mg/kg dry	10	30.8	ND	94	75-125%	---	---	
Silver	32.3	---	0.246	mg/kg dry	10	30.8	ND	105	75-125%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120536 - EPA 3051A							**Soil**					
Blank (0120536-BLK1)			Prepared: 12/15/20 08:36 Analyzed: 12/16/20 18:06									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (0120536-BS1)			Prepared: 12/15/20 08:36 Analyzed: 12/16/20 18:11									
EPA 6020B												
Arsenic	54.5	---	1.00	mg/kg wet	10	50.0	---	109	80-120%	---	---	
Barium	50.8	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Cadmium	53.6	---	0.200	mg/kg wet	10	50.0	---	107	80-120%	---	---	
Chromium	52.8	---	1.00	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Lead	54.4	---	0.200	mg/kg wet	10	50.0	---	109	80-120%	---	---	
Mercury	1.08	---	0.0800	mg/kg wet	10	1.00	---	108	80-120%	---	---	
Selenium	26.8	---	1.00	mg/kg wet	10	25.0	---	107	80-120%	---	---	
Silver	27.7	---	0.200	mg/kg wet	10	25.0	---	111	80-120%	---	---	
Duplicate (0120536-DUP1)			Prepared: 12/15/20 08:36 Analyzed: 12/16/20 18:36									
QC Source Sample: Non-SDG (A0L0292-10)												
Arsenic	**10.8**	---	1.44	mg/kg dry	10	---	8.28	---	---	**26**	**20%**	Q-04
Barium	**149**	---	1.44	mg/kg dry	10	---	156	---	---	5	20%	
Cadmium	ND	---	0.288	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	**21.9**	---	1.44	mg/kg dry	10	---	23.3	---	---	6	20%	
Lead	**13.5**	---	0.288	mg/kg dry	10	---	14.5	---	---	7	20%	
Mercury	ND	---	0.115	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1.44	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.288	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (0120536-MS1)			Prepared: 12/15/20 08:36 Analyzed: 12/16/20 18:50									

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6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120536 - EPA 3051A							**Soil**					
Matrix Spike (0120536-MS1)			Prepared: 12/15/20 08:36		Analyzed: 12/16/20 18:50							
QC Source Sample: Non-SDG (A0L0292-10)												
EPA 6020B												
Arsenic	92.6	---	1.52	mg/kg dry	10	76.2	8.28	111	75-125%	---	---	
Barium	248	---	1.52	mg/kg dry	10	76.2	156	121	75-125%	---	---	
Cadmium	83.9	---	0.305	mg/kg dry	10	76.2	ND	110	75-125%	---	---	
Chromium	107	---	1.52	mg/kg dry	10	76.2	23.3	110	75-125%	---	---	
Lead	96.5	---	0.305	mg/kg dry	10	76.2	14.5	108	75-125%	---	---	
Mercury	1.61	---	0.122	mg/kg dry	10	1.52	ND	106	75-125%	---	---	
Selenium	40.5	---	1.52	mg/kg dry	10	38.1	ND	106	75-125%	---	---	
Silver	43.0	---	0.305	mg/kg dry	10	38.1	ND	113	75-125%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120759 - EPA 3051A							**Soil**					
Blank (0120759-BLK1)			Prepared: 12/21/20 10:57 Analyzed: 12/22/20 15:33									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (0120759-BS1)			Prepared: 12/21/20 10:57 Analyzed: 12/22/20 15:38									
EPA 6020B												
Arsenic	52.9	---	1.00	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Barium	50.9	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Cadmium	51.5	---	0.200	mg/kg wet	10	50.0	---	103	80-120%	---	---	
Chromium	50.7	---	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Lead	49.0	---	0.200	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Mercury	0.943	---	0.0800	mg/kg wet	10	1.00	---	94	80-120%	---	---	
Selenium	25.3	---	1.00	mg/kg wet	10	25.0	---	101	80-120%	---	---	
Silver	25.7	---	0.200	mg/kg wet	10	25.0	---	103	80-120%	---	---	
Duplicate (0120759-DUP1)			Prepared: 12/21/20 10:57 Analyzed: 12/22/20 16:03									
QC Source Sample: C003 (A0L0287-44)												
EPA 6020B												
Arsenic	**5.96**	---	1.23	mg/kg dry	10	---	6.37	---	---	7	20%	
Barium	**150**	---	1.23	mg/kg dry	10	---	141	---	---	6	20%	
Cadmium	**0.481**	---	0.246	mg/kg dry	10	---	0.542	---	---	12	20%	
Chromium	**17.7**	---	1.23	mg/kg dry	10	---	16.1	---	---	9	20%	
Lead	**68.9**	---	0.246	mg/kg dry	10	---	77.5	---	---	12	20%	
Mercury	ND	---	0.0984	mg/kg dry	10	---	0.0644	---	---	***	20%	
Selenium	ND	---	1.23	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.246	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (0120759-MS1)			Prepared: 12/21/20 10:57 Analyzed: 12/22/20 16:08									

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0120759 - EPA 3051A							**Soil**					
Matrix Spike (0120759-MS1)			Prepared: 12/21/20 10:57		Analyzed: 12/22/20 16:08							
QC Source Sample: C003 (A0L0287-44)												
EPA 6020B												
Arsenic	73.9	---	1.30	mg/kg dry	10	64.9	6.37	104	75-125%	---	---	
Barium	227	---	1.30	mg/kg dry	10	64.9	141	**132**	**75-125%**	---	---	A-01, Q-01
Cadmium	66.5	---	0.260	mg/kg dry	10	64.9	0.542	102	75-125%	---	---	
Chromium	84.2	---	1.30	mg/kg dry	10	64.9	16.1	105	75-125%	---	---	
Lead	124	---	0.260	mg/kg dry	10	64.9	77.5	**72**	**75-125%**	---	---	A-01, Q-01
Mercury	1.21	---	0.104	mg/kg dry	10	1.30	0.0644	88	75-125%	---	---	
Selenium	31.0	---	1.30	mg/kg dry	10	32.4	ND	96	75-125%	---	---	
Silver	33.1	---	0.260	mg/kg dry	10	32.4	ND	102	75-125%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1012667 - EPA 3051A							**Soil**					
Blank (1012667-BLK1)			Prepared: 01/08/21 08:40		Analyzed: 01/08/21 14:43							
EPA 6020B												
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1012667-BS1)			Prepared: 01/08/21 08:40		Analyzed: 01/08/21 14:49							
EPA 6020B												
Lead	54.4	---	0.200	mg/kg wet	10	50.0	---	109	80-120%	---	---	
Duplicate (1012667-DUP1)			Prepared: 01/08/21 08:40		Analyzed: 01/08/21 15:15							
QC Source Sample: B19 12-13 (A0L0287-34)												
EPA 6020B												
Lead	**9.30**	---	0.249	mg/kg dry	10	---	9.29	---	---	0.02	20%	
Matrix Spike (1012667-MS1)			Prepared: 01/08/21 08:40		Analyzed: 01/08/21 15:20							
QC Source Sample: B19 12-13 (A0L0287-34)												
EPA 6020B												
Lead	74.5	---	0.257	mg/kg dry	10	64.2	9.29	102	75-125%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

TCLP Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1012692 - EPA 1311/3015							**Soil**					
Blank (1012692-BLK1)			Prepared: 01/08/21 12:16 Analyzed: 01/08/21 20:02									
1311/6020B												
Lead	ND	---	0.0500	mg/L	10	---	---	---	---	---	---	TCLP
LCS (1012692-BS1)			Prepared: 01/08/21 12:16 Analyzed: 01/08/21 20:07									
1311/6020B												
Lead	4.97	---	0.0500	mg/L	10	5.00	---	99	80-120%	---	---	TCLP
Matrix Spike (1012692-MS1)			Prepared: 01/08/21 12:16 Analyzed: 01/08/21 21:02									
QC Source Sample: C006 (A0L0287-47)												
1311/6020B												
Lead	5.08	---	0.0500	mg/L	10	5.00	0.0457	101	50-150%	---	---	
Matrix Spike (1012692-MS2)			Prepared: 01/08/21 12:16 Analyzed: 01/08/21 21:13									
QC Source Sample: Non-SDG (A1A0084-01)												
1311/6020B												
Lead	5.21	---	0.0500	mg/L	10	5.00	0.169	101	50-150%	---	---	

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120369 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120369-DUP1)			Prepared: 12/10/20 08:17		Analyzed: 12/11/20 07:24							
QC Source Sample: B1 3-3.5 (A0L0287-01)												
EPA 8000D												
% Solids	**78.7**	---	1.00	%	1	---	78.6	---	---	0.2	10%	
Duplicate (0120369-DUP2)			Prepared: 12/10/20 08:17		Analyzed: 12/11/20 07:24							
QC Source Sample: B15 0.5-1 (A0L0287-17)												
EPA 8000D												
% Solids	**82.1**	---	1.00	%	1	---	81.9	---	---	0.3	10%	
Duplicate (0120369-DUP3)			Prepared: 12/10/20 08:17		Analyzed: 12/11/20 07:24							
QC Source Sample: Non-SDG (A0L0292-06)												
% Solids	**71.1**	---	1.00	%	1	---	71.3	---	---	0.2	10%	
Duplicate (0120369-DUP4)			Prepared: 12/10/20 08:17		Analyzed: 12/11/20 07:24							
QC Source Sample: Non-SDG (A0L0292-19)												
% Solids	**72.0**	---	1.00	%	1	---	72.4	---	---	0.5	10%	
Duplicate (0120369-DUP5)			Prepared: 12/10/20 19:28		Analyzed: 12/11/20 07:24							
QC Source Sample: Non-SDG (A0L0370-02)												
% Solids	**91.7**	---	1.00	%	1	---	91.1	---	---	0.6	10%	

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

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120472 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120472-DUP1)			Prepared: 12/14/20 07:37		Analyzed: 12/15/20 08:35							
QC Source Sample: B15 7.5-8.5 (A0L0287-18)												
EPA 8000D												
% Solids	**84.6**	---	1.00	%	1	---	84.9	---	---	0.4	10%	
Duplicate (0120472-DUP2)			Prepared: 12/14/20 07:37		Analyzed: 12/15/20 08:35							
QC Source Sample: Non-SDG (A0L0327-08)												
% Solids	**75.7**	---	1.00	%	1	---	75.6	---	---	0.2	10%	
Duplicate (0120472-DUP3)			Prepared: 12/14/20 07:39		Analyzed: 12/15/20 08:35							
QC Source Sample: Non-SDG (A0L0364-01)												
% Solids	**71.5**	---	1.00	%	1	---	72.0	---	---	0.7	10%	
Duplicate (0120472-DUP4)			Prepared: 12/14/20 07:39		Analyzed: 12/15/20 08:35							
QC Source Sample: Non-SDG (A0L0391-01)												
% Solids	**85.1**	---	1.00	%	1	---	86.3	---	---	1	10%	
Duplicate (0120472-DUP5)			Prepared: 12/14/20 19:51		Analyzed: 12/15/20 08:35							
QC Source Sample: Non-SDG (A0L0440-01)												
% Solids	**92.1**	---	1.00	%	1	---	91.8	---	---	0.4	10%	
Duplicate (0120472-DUP6)			Prepared: 12/14/20 19:51		Analyzed: 12/15/20 08:35							
QC Source Sample: Non-SDG (A0L0440-16)												
% Solids	**82.1**	---	1.00	%	1	---	83.1	---	---	1	10%	
Duplicate (0120472-DUP7)			Prepared: 12/14/20 19:51		Analyzed: 12/15/20 08:35							
QC Source Sample: Non-SDG (A0L0465-02)												
% Solids	**80.2**	---	1.00	%	1	---	82.0	---	---	2	10%	

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

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120537 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120537-DUP1)			Prepared: 12/15/20 08:41		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0264-02)												
% Solids	**95.1**	---	1.00	%	1	---	95.1	---	---	0.06	10%	
Duplicate (0120537-DUP2)			Prepared: 12/15/20 08:41		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0363-03)												
% Solids	**87.5**	---	1.00	%	1	---	87.4	---	---	0.06	10%	
Duplicate (0120537-DUP3)			Prepared: 12/15/20 08:41		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0407-03)												
% Solids	**93.0**	---	1.00	%	1	---	94.3	---	---	1	10%	
Duplicate (0120537-DUP4)			Prepared: 12/15/20 08:41		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0407-11)												
% Solids	**82.9**	---	1.00	%	1	---	82.1	---	---	0.9	10%	
Duplicate (0120537-DUP5)			Prepared: 12/15/20 08:41		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0430-05)												
% Solids	**77.7**	---	1.00	%	1	---	77.9	---	---	0.2	10%	
Duplicate (0120537-DUP6)			Prepared: 12/15/20 08:41		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0456-08)												
% Solids	**87.4**	---	1.00	%	1	---	88.5	---	---	1	10%	
Duplicate (0120537-DUP7)			Prepared: 12/15/20 20:51		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0505-01)												
% Solids	**76.2**	---	1.00	%	1	---	76.0	---	---	0.3	10%	
Duplicate (0120537-DUP8)			Prepared: 12/15/20 20:51		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0509-09)												
% Solids	**78.9**	---	1.00	%	1	---	78.7	---	---	0.2	10%	

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120537 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120537-DUP9)			Prepared: 12/15/20 20:51		Analyzed: 12/16/20 07:39							
QC Source Sample: Non-SDG (A0L0513-01)												
% Solids	**81.1**	---	1.00	%	1	---	81.0	---	---	0.07	10%	

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 0120688 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120688-DUP1)			Prepared: 12/18/20 08:51		Analyzed: 12/21/20 07:31							
QC Source Sample: Non-SDG (A0L0619-01)												
% Solids	**66.3**	---	1.00	%	1	---	67.2	---	---	1	10%	
Duplicate (0120688-DUP2)			Prepared: 12/18/20 08:51		Analyzed: 12/21/20 07:31							
QC Source Sample: Non-SDG (A0L0685-02)												
% Solids	**83.3**	---	1.00	%	1	---	80.3	---	---	4	10%	
Duplicate (0120688-DUP3)			Prepared: 12/18/20 17:05		Analyzed: 12/21/20 07:31							
QC Source Sample: Non-SDG (A0L0730-01)												
% Solids	**87.3**	---	1.00	%	1	---	87.3	---	---	0.09	10%	
Duplicate (0120688-DUP4)			Prepared: 12/18/20 18:11		Analyzed: 12/21/20 07:31							
QC Source Sample: Non-SDG (A0L0736-01)												
% Solids	**80.4**	---	1.00	%	1	---	79.5	---	---	1	10%	
Duplicate (0120688-DUP5)			Prepared: 12/18/20 18:34		Analyzed: 12/21/20 07:31							
QC Source Sample: Non-SDG (A0L0739-05)												
% Solids	**85.1**	---	1.00	%	1	---	84.8	---	---	0.4	10%	

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

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6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120848 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120848-DUP1)			Prepared: 12/23/20 07:44			Analyzed: 12/28/20 07:34						
QC Source Sample: B13 8.5-9 (A0L0287-14)												
EPA 8000D												
% Solids	**88.3**	---	1.00	%	1	---	88.5	---	---	0.2	10%	
Duplicate (0120848-DUP2)			Prepared: 12/23/20 07:44			Analyzed: 12/28/20 07:34						
QC Source Sample: Non-SDG (A0L0785-04)												
% Solids	**78.6**	---	1.00	%	1	---	76.7	---	---	2	10%	
Duplicate (0120848-DUP3)			Prepared: 12/23/20 07:44			Analyzed: 12/28/20 07:34						
QC Source Sample: Non-SDG (A0L0888-05)												
% Solids	**65.1**	---	1.00	%	1	---	66.7	---	---	3	10%	
Duplicate (0120848-DUP4)			Prepared: 12/23/20 18:46			Analyzed: 12/28/20 07:34						
QC Source Sample: Non-SDG (A0L0925-04)												
% Solids	**75.7**	---	1.00	%	1	---	76.3	---	---	0.9	10%	
Duplicate (0120848-DUP5)			Prepared: 12/23/20 18:46			Analyzed: 12/28/20 07:34						
QC Source Sample: Non-SDG (A0L0926-02)												
% Solids	**78.6**	---	1.00	%	1	---	78.9	---	---	0.3	10%	

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

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 0120892 - Total Solids (Dry Weight)							**Soil**					
Duplicate (0120892-DUP1)			Prepared: 12/28/20 07:47			Analyzed: 12/29/20 08:57						
QC Source Sample: B15 9-9.5 (A0L0287-19)												
EPA 8000D												
% Solids	**81.2**	---	1.00	%	1	---	81.0	---	---	0.3	10%	
Duplicate (0120892-DUP2)			Prepared: 12/28/20 07:47			Analyzed: 12/29/20 08:57						
QC Source Sample: Non-SDG (A0L0920-05)												
% Solids	**76.2**	---	1.00	%	1	---	77.1	---	---	1	10%	
Duplicate (0120892-DUP3)			Prepared: 12/28/20 07:47			Analyzed: 12/29/20 08:57						
QC Source Sample: Non-SDG (A0L0929-12)												
% Solids	**84.7**	---	1.00	%	1	---	83.7	---	---	1	10%	
Duplicate (0120892-DUP4)			Prepared: 12/28/20 18:12			Analyzed: 12/29/20 08:57						
QC Source Sample: Non-SDG (A0L0958-01)												
% Solids	**75.0**	---	1.00	%	1	---	75.2	---	---	0.2	10%	

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

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 1020269 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1020269-DUP1)			Prepared: 02/08/21 07:33		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0240-01)												
% Solids	**85.7**	---	1.00	%	1	---	86.8	---	---	1	10%	
Duplicate (1020269-DUP2)			Prepared: 02/08/21 07:33		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0242-01)												
% Solids	**75.0**	---	1.00	%	1	---	73.9	---	---	1	10%	
Duplicate (1020269-DUP3)			Prepared: 02/08/21 12:59		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0279-06)												
% Solids	**90.6**	---	1.00	%	1	---	90.2	---	---	0.4	10%	
Duplicate (1020269-DUP4)			Prepared: 02/08/21 12:59		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0264-04)												
% Solids	**83.2**	---	1.00	%	1	---	82.1	---	---	1	10%	
Duplicate (1020269-DUP5)			Prepared: 02/08/21 19:13		Analyzed: 02/09/21 07:54							
QC Source Sample: B17 11.5-12.5 (A0L0287-32)												
EPA 8000D												
% Solids	**84.7**	---	1.00	%	1	---	84.5	---	---	0.2	10%	
Duplicate (1020269-DUP6)			Prepared: 02/08/21 19:13		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0286-07)												
% Solids	**94.0**	---	1.00	%	1	---	93.8	---	---	0.2	10%	
Duplicate (1020269-DUP7)			Prepared: 02/08/21 19:13		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0288-06)												
% Solids	**86.0**	---	1.00	%	1	---	85.5	---	---	0.6	10%	
Duplicate (1020269-DUP8)			Prepared: 02/08/21 19:13		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0295-02)												
% Solids	**75.0**	---	1.00	%	1	---	74.7	---	---	0.5	10%	

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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 1020269 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1020269-DUP9)			Prepared: 02/08/21 19:13		Analyzed: 02/09/21 07:54							
QC Source Sample: Non-SDG (A1B0302-02)												
% Solids	**86.5**	---	1.00	%	1	---	85.1	---	---	2	10%	

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

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

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: 0120451							
A0L0287-20	Soil	NWTPH-Dx	12/07/20 14:15	12/11/20 16:17	10.44g/5mL	10g/5mL	0.96
Batch: 0120557							
A0L0287-18	Soil	NWTPH-Dx	12/07/20 13:40	12/15/20 12:42	10.39g/5mL	10g/5mL	0.96
A0L0287-31	Soil	NWTPH-Dx	12/08/20 09:55	12/15/20 12:42	10.27g/5mL	10g/5mL	0.97
A0L0287-33	Soil	NWTPH-Dx	12/08/20 10:55	12/15/20 12:42	10.94g/5mL	10g/5mL	0.91
Batch: 0120601							
A0L0287-42	Soil	NWTPH-Dx	12/08/20 12:35	12/16/20 11:09	10.59g/5mL	10g/5mL	0.94
A0L0287-43	Soil	NWTPH-Dx	12/08/20 09:10	12/16/20 11:09	10.65g/5mL	10g/5mL	0.94
A0L0287-44	Soil	NWTPH-Dx	12/07/20 09:20	12/16/20 11:09	10.34g/5mL	10g/5mL	0.97
A0L0287-45	Soil	NWTPH-Dx	12/07/20 14:25	12/16/20 11:09	10.09g/5mL	10g/5mL	0.99
A0L0287-46	Soil	NWTPH-Dx	12/08/20 09:50	12/16/20 11:09	10.15g/5mL	10g/5mL	0.99
A0L0287-47	Soil	NWTPH-Dx	12/07/20 11:20	12/16/20 11:09	10.51g/5mL	10g/5mL	0.95
Batch: 0120773							
A0L0287-14	Soil	NWTPH-Dx	12/07/20 11:25	12/21/20 13:13	10.37g/5mL	10g/5mL	0.96
A0L0287-19	Soil	NWTPH-Dx	12/07/20 13:45	12/21/20 13:13	10.51g/5mL	10g/5mL	0.95
A0L0287-21	Soil	NWTPH-Dx	12/07/20 14:20	12/21/20 13:13	10.18g/5mL	10g/5mL	0.98
A0L0287-23	Soil	NWTPH-Dx	12/07/20 14:35	12/21/20 13:13	10.61g/5mL	10g/5mL	0.94
A0L0287-29	Soil	NWTPH-Dx	12/08/20 09:40	12/21/20 13:13	10.32g/5mL	10g/5mL	0.97

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: 0120412							
A0L0287-01	Soil	NWTPH-Gx (MS)	12/07/20 09:20	12/07/20 09:20	6.47g/5mL	5g/5mL	0.77
A0L0287-04	Soil	NWTPH-Gx (MS)	12/07/20 09:50	12/07/20 09:50	6.15g/5mL	5g/5mL	0.81
A0L0287-05	Soil	NWTPH-Gx (MS)	12/07/20 10:05	12/07/20 10:05	6.7g/5mL	5g/5mL	0.75
Batch: 0120428							
A0L0287-07	Soil	NWTPH-Gx (MS)	12/07/20 10:30	12/07/20 10:30	6.93g/5mL	5g/5mL	0.72
A0L0287-12	Soil	NWTPH-Gx (MS)	12/07/20 11:00	12/08/20 18:38	5.34g/5mL	5g/5mL	0.94
A0L0287-13	Soil	NWTPH-Gx (MS)	12/07/20 11:20	12/07/20 11:20	5.83g/5mL	5g/5mL	0.86
A0L0287-15	Soil	NWTPH-Gx (MS)	12/07/20 13:00	12/07/20 13:00	8.17g/5mL	5g/5mL	0.61
Batch: 0120456							
A0L0287-17	Soil	NWTPH-Gx (MS)	12/07/20 13:35	12/07/20 13:35	5.91g/5mL	5g/5mL	0.85

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

SAMPLE PREPARATION INFORMATION

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
A0L0287-30	Soil	NWTPH-Gx (MS)	12/08/20 09:50	12/08/20 09:50	6.62g/5mL	5g/5mL	0.76
Batch: 0120647							
A0L0287-18RE1	Soil	NWTPH-Gx (MS)	12/07/20 13:40	12/07/20 13:40	5.9g/5mL	5g/5mL	0.85
A0L0287-31RE1	Soil	NWTPH-Gx (MS)	12/08/20 09:55	12/08/20 09:55	5.76g/5mL	5g/5mL	0.87
A0L0287-33RE1	Soil	NWTPH-Gx (MS)	12/08/20 10:55	12/08/20 10:55	6.3g/5mL	5g/5mL	0.79
Batch: 0120740							
A0L0287-23	Soil	NWTPH-Gx (MS)	12/07/20 14:35	12/18/20 16:53	5.95g/5mL	5g/5mL	0.84

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0120412							
A0L0287-01	Soil	5035A/8260D	12/07/20 09:20	12/07/20 09:20	6.47g/5mL	5g/5mL	0.77
A0L0287-04	Soil	5035A/8260D	12/07/20 09:50	12/07/20 09:50	6.15g/5mL	5g/5mL	0.81
A0L0287-05	Soil	5035A/8260D	12/07/20 10:05	12/07/20 10:05	6.7g/5mL	5g/5mL	0.75
Batch: 0120428							
A0L0287-07	Soil	5035A/8260D	12/07/20 10:30	12/07/20 10:30	6.93g/5mL	5g/5mL	0.72
A0L0287-12	Soil	5035A/8260D	12/07/20 11:00	12/08/20 18:38	5.34g/5mL	5g/5mL	0.94
A0L0287-13	Soil	5035A/8260D	12/07/20 11:20	12/07/20 11:20	5.83g/5mL	5g/5mL	0.86
A0L0287-15	Soil	5035A/8260D	12/07/20 13:00	12/07/20 13:00	8.17g/5mL	5g/5mL	0.61
Batch: 0120456							
A0L0287-17	Soil	5035A/8260D	12/07/20 13:35	12/07/20 13:35	5.91g/5mL	5g/5mL	0.85
A0L0287-30	Soil	5035A/8260D	12/08/20 09:50	12/08/20 09:50	6.62g/5mL	5g/5mL	0.76
Batch: 0120647							
A0L0287-18RE1	Soil	5035A/8260D	12/07/20 13:40	12/07/20 13:40	5.9g/5mL	5g/5mL	0.85
A0L0287-31RE1	Soil	5035A/8260D	12/08/20 09:55	12/08/20 09:55	5.76g/5mL	5g/5mL	0.87
A0L0287-33RE1	Soil	5035A/8260D	12/08/20 10:55	12/08/20 10:55	6.3g/5mL	5g/5mL	0.79
Batch: 0120740							
A0L0287-23	Soil	5035A/8260D	12/07/20 14:35	12/18/20 16:53	5.95g/5mL	5g/5mL	0.84

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

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Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0120889							
A0L0287-42	Soil	EPA 8082A	12/08/20 12:35	12/28/20 07:02	10.16g/5mL	10g/5mL	0.98
A0L0287-45	Soil	EPA 8082A	12/07/20 14:25	12/28/20 07:02	10.14g/5mL	10g/5mL	0.99

Organochlorine Pesticides by EPA 8081B

Prep: EPA 3546/3640A (GPC)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0120466							
A0L0287-03RE1	Soil	EPA 8081B	12/07/20 09:45	12/11/20 10:39	10.93g/10mL	10g/5mL	1.83

Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0120742							
A0L0287-42	Soil	EPA 8270E	12/08/20 12:35	12/21/20 11:38	15.04g/2mL	15g/2mL	1.00
A0L0287-45	Soil	EPA 8270E	12/07/20 14:25	12/21/20 07:06	15.28g/2mL	15g/2mL	0.98

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0120478							
A0L0287-18	Soil	EPA 6020B	12/07/20 13:40	12/14/20 09:02	0.464g/50mL	0.5g/50mL	1.08
A0L0287-20	Soil	EPA 6020B	12/07/20 14:15	12/14/20 09:02	0.497g/50mL	0.5g/50mL	1.01
A0L0287-31	Soil	EPA 6020B	12/08/20 09:55	12/14/20 09:02	0.506g/50mL	0.5g/50mL	0.99
A0L0287-33	Soil	EPA 6020B	12/08/20 10:55	12/14/20 09:02	0.484g/50mL	0.5g/50mL	1.03
Batch: 0120536							
A0L0287-11	Soil	EPA 6020B	12/07/20 10:55	12/15/20 08:36	0.487g/50mL	0.5g/50mL	1.03
A0L0287-11RE1	Soil	EPA 6020B	12/07/20 10:55	12/15/20 08:36	0.487g/50mL	0.5g/50mL	1.03
Batch: 0120759							
A0L0287-23	Soil	EPA 6020B	12/07/20 14:35	12/21/20 10:57	0.515g/50mL	0.5g/50mL	0.97
A0L0287-42	Soil	EPA 6020B	12/08/20 12:35	12/21/20 10:57	0.488g/50mL	0.5g/50mL	1.02
A0L0287-42RE1	Soil	EPA 6020B	12/08/20 12:35	12/21/20 10:57	0.488g/50mL	0.5g/50mL	1.02
A0L0287-43	Soil	EPA 6020B	12/08/20 09:10	12/21/20 10:57	0.51g/50mL	0.5g/50mL	0.98

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SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A0L0287-44	Soil	EPA 6020B	12/07/20 09:20	12/21/20 10:57	0.465g/50mL	0.5g/50mL	1.08
A0L0287-45	Soil	EPA 6020B	12/07/20 14:25	12/21/20 10:57	0.482g/50mL	0.5g/50mL	1.04
A0L0287-46	Soil	EPA 6020B	12/08/20 09:50	12/21/20 10:57	0.513g/50mL	0.5g/50mL	0.98
A0L0287-47	Soil	EPA 6020B	12/07/20 11:20	12/21/20 10:57	0.469g/50mL	0.5g/50mL	1.07
Batch: 1012667							
A0L0287-12	Soil	EPA 6020B	12/07/20 11:00	01/08/21 08:40	0.473g/50mL	0.5g/50mL	1.06
A0L0287-14	Soil	EPA 6020B	12/07/20 11:25	01/08/21 08:40	0.469g/50mL	0.5g/50mL	1.07
A0L0287-32	Soil	EPA 6020B	12/08/20 10:10	01/08/21 08:40	0.46g/50mL	0.5g/50mL	1.09
A0L0287-34	Soil	EPA 6020B	12/08/20 11:00	01/08/21 08:40	0.495g/50mL	0.5g/50mL	1.01

TCLP Metals by EPA 6020B (ICPMS)

Prep: EPA 1311/3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1012692							
A0L0287-11	Soil	1311/6020B	12/07/20 10:55	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00
A0L0287-23	Soil	1311/6020B	12/07/20 14:35	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00
A0L0287-31	Soil	1311/6020B	12/08/20 09:55	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00
A0L0287-33	Soil	1311/6020B	12/08/20 10:55	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00
A0L0287-42	Soil	1311/6020B	12/08/20 12:35	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00
A0L0287-45	Soil	1311/6020B	12/07/20 14:25	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00
A0L0287-47	Soil	1311/6020B	12/07/20 11:20	01/08/21 12:16	10mL/50mL	10mL/50mL	1.00

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0120369							
A0L0287-01	Soil	EPA 8000D	12/07/20 09:20	12/10/20 08:17			NA
A0L0287-03	Soil	EPA 8000D	12/07/20 09:45	12/10/20 08:17			NA
A0L0287-04	Soil	EPA 8000D	12/07/20 09:50	12/10/20 08:17			NA
A0L0287-05	Soil	EPA 8000D	12/07/20 10:05	12/10/20 08:17			NA
A0L0287-07	Soil	EPA 8000D	12/07/20 10:30	12/10/20 08:17			NA
A0L0287-09	Soil	EPA 8000D	12/07/20 10:40	12/10/20 08:17			NA
A0L0287-11	Soil	EPA 8000D	12/07/20 10:55	12/10/20 08:17			NA
A0L0287-12	Soil	EPA 8000D	12/07/20 11:00	12/10/20 08:17			NA
A0L0287-13	Soil	EPA 8000D	12/07/20 11:20	12/10/20 08:17			NA

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Darrell Auvil, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A0L0287-15	Soil	EPA 8000D	12/07/20 13:00	12/10/20 08:17			NA
A0L0287-17	Soil	EPA 8000D	12/07/20 13:35	12/10/20 08:17			NA
A0L0287-20	Soil	EPA 8000D	12/07/20 14:15	12/10/20 08:17			NA
A0L0287-24	Soil	EPA 8000D	12/07/20 14:45	12/10/20 08:17			NA
A0L0287-25	Soil	EPA 8000D	12/07/20 15:00	12/10/20 08:17			NA
A0L0287-30	Soil	EPA 8000D	12/08/20 09:50	12/10/20 08:17			NA
A0L0287-35	Soil	EPA 8000D	12/08/20 11:30	12/10/20 08:17			NA
Batch: 0120472							
A0L0287-18	Soil	EPA 8000D	12/07/20 13:40	12/14/20 07:37			NA
A0L0287-31	Soil	EPA 8000D	12/08/20 09:55	12/14/20 07:37			NA
A0L0287-33	Soil	EPA 8000D	12/08/20 10:55	12/14/20 07:37			NA
Batch: 0120537							
A0L0287-42	Soil	EPA 8000D	12/08/20 12:35	12/15/20 08:41			NA
A0L0287-43	Soil	EPA 8000D	12/08/20 09:10	12/15/20 08:41			NA
A0L0287-44	Soil	EPA 8000D	12/07/20 09:20	12/15/20 08:41			NA
A0L0287-45	Soil	EPA 8000D	12/07/20 14:25	12/15/20 08:41			NA
A0L0287-46	Soil	EPA 8000D	12/08/20 09:50	12/15/20 08:41			NA
A0L0287-47	Soil	EPA 8000D	12/07/20 11:20	12/15/20 08:41			NA
Batch: 0120688							
A0L0287-23	Soil	EPA 8000D	12/07/20 14:35	12/18/20 17:05			NA
Batch: 0120848							
A0L0287-14	Soil	EPA 8000D	12/07/20 11:25	12/23/20 07:44			NA
A0L0287-21	Soil	EPA 8000D	12/07/20 14:20	12/23/20 07:44			NA
Batch: 0120892							
A0L0287-19	Soil	EPA 8000D	12/07/20 13:45	12/28/20 07:47			NA
A0L0287-29	Soil	EPA 8000D	12/08/20 09:40	12/28/20 07:47			NA
Batch: 1020269							
A0L0287-32	Soil	EPA 8000D	12/08/20 10:10	02/08/21 19:13			NA
A0L0287-34	Soil	EPA 8000D	12/08/20 11:00	02/08/21 19:13			NA

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: 1012586							

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5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

SAMPLE PREPARATION INFORMATION

TCLP Extraction by EPA 1311

Prep: EPA 1311 (TCLP)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A0L0287-11	Soil	EPA 1311	12/07/20 10:55	01/07/21 15:15	100g/1997mL	100g/2000mL	NA
A0L0287-23	Soil	EPA 1311	12/07/20 14:35	01/07/21 15:15	100g/1985.3mL	100g/2000mL	NA
A0L0287-31	Soil	EPA 1311	12/08/20 09:55	01/07/21 15:15	100g/1985.2mL	100g/2000mL	NA
A0L0287-33	Soil	EPA 1311	12/08/20 10:55	01/07/21 15:15	100g/1987.8mL	100g/2000mL	NA
A0L0287-42	Soil	EPA 1311	12/08/20 12:35	01/07/21 15:15	100g/1995.6mL	100g/2000mL	NA
A0L0287-45	Soil	EPA 1311	12/07/20 14:25	01/07/21 15:15	100g/1988mL	100g/2000mL	NA
A0L0287-47	Soil	EPA 1311	12/07/20 11:20	01/07/21 15:15	100g/1985.8mL	100g/2000mL	NA

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QUALIFIER DEFINITIONS

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

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A-01	Serial dilution was performed and passes acceptance criteria. Data are acceptable.
B	Analyte detected in an associated blank at a level above the MRL. (See Notes and Conventions below.)
B-02	Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
C-05	Extract has undergone a GPC (Gel-Permeation Chromatography) cleanup per EPA 3640A. Reporting levels may be raised due to dilution necessary for cleanup. Sample Final Volume includes the GPC dilution factor, see the Prep page for details.
C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
E-05	Estimated Result. Initial Calibration Verification (ICV) failed high. No affect on non-detect results.
EST	Result reported as an Estimated Value. Results Estimated. Initial Calibration level refit percent error failed method criteria.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
M-05	Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
P-12	Result estimated due to the presence of multiple PCB Aroclors and/or PCB congeners not defined as Aroclors.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-18	Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
Q-29	Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
Q-31	Estimated Results. Recovery of Continuing Calibration Verification sample below lower control limit for this analyte. Results are likely biased low.
Q-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
Q-52	Due to known erratic recoveries, the result and reporting levels for this analyte are reported as Estimated Values. This analyte may not have passed all QC requirements for this method.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 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 8260/8270 by +11%. The results are reported as Estimated Values.

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Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +13%. 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 8260/8270 by +14%. The results are reported as Estimated Values.
Q-54d	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +18%. The results are reported as Estimated Values.
Q-54e	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +2%. The results are reported as Estimated Values.
Q-54f	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +21%. 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 8260/8270 by +30%. 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 8260/8270 by +35%. The results are reported as Estimated Values.
Q-54i	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +37%. 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 8260/8270 by +4%. 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 8260/8270 by +5%. 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 8260/8270 by +8%. The results are reported as Estimated Values.
Q-54m	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -2%. The results are reported as Estimated Values.
Q-54n	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -22%. The results are reported as Estimated Values.
Q-54o	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -3%. The results are reported as Estimated Values.
Q-54p	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -8%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, 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 8260
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
S-01	Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
S-03	Reextraction and analysis, or analysis of laboratory duplicate, confirms surrogate failure due to sample matrix effect.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
TCLP	This batch QC sample was prepared with TCLP or SPLP fluid from preparation batch 1012586.

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V-15 Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

V-16 Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of sampling.

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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) may not be 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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Darrell Auvil, Project Manager

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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

ORELAP 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

Darrell Auvil, Project Manager

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A0L0287

CHAIN OF CUSTODY

COLES + BETTS ENVIRONMENTAL CONSULTING, LLC
5741 NE Flanders St., Portland, OR 97213
office: 503-477-6150
mobile: 503-819-2835

Laboratory Apex Labs
Lab Project No.
Chain of Custody No. 1

Project Manager Jill Betts
Project No. 281
Project Name 8-Oct-04
Collected by Michael Reynolds and Jill Betts

Liquid with Sediment Sample — Test Filtrate / Test Sediment / Test Both
Multi-Phase Sample — Test One (which) / Test Separately / Stake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N) No
Provide Preliminary Fax Results Yes

Comments
PAHs and PCBs will only be analyzed if Dx- and/or oil-range detections. Jill will contact Apex to determine which samples, if any, will be run for PCBs and/or PAHs.

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Water	Other	Number of Containers	Analyses to be Performed: NWTPH-Dx	NWTPH-Gx	RCRA8 Method 6010	VOCs by EPA 8260C	Chlorinated Pesticides by EPA Method 8081B	PAHs 8270 SIM	PCBs by EPA Method 8082	RUSH	Remarks
	BH 2-35	12/7/20	9:20		X			4	✓	✓	✓	✓					
	BH 165-17		9:25		X			4	✓	✓	✓						HOLD
	BH 2-23		9:45					1					✓		#		
	BH 5-55		9:50					4	✓	✓	✓	✓					
	BH 0.5-1		10:05					4	✓	✓	✓	✓					
	BH 4-45		10:10					4	✓	✓	✓	✓					HOLD
	BH 0.5-1		10:30					4	✓	✓	✓	✓					
	BH 15-2		10:35					4									
	BH 0.5-1		10:40					1	✓	✓	✓						HOLD
	BH 15-2		10:45					1									
	BH 1-2	✓	10:55		✓			1			✓						HOLD

Relinquished by	Company	Date	Time	Received by / Company
Jill Betts	CBEC	12/8/20	1400	Anissa Kemp / Apex Labs
Relinquished by	Company	Date	Time	Received by / Company
Relinquished by	Company	Date	Time	Received by / Company

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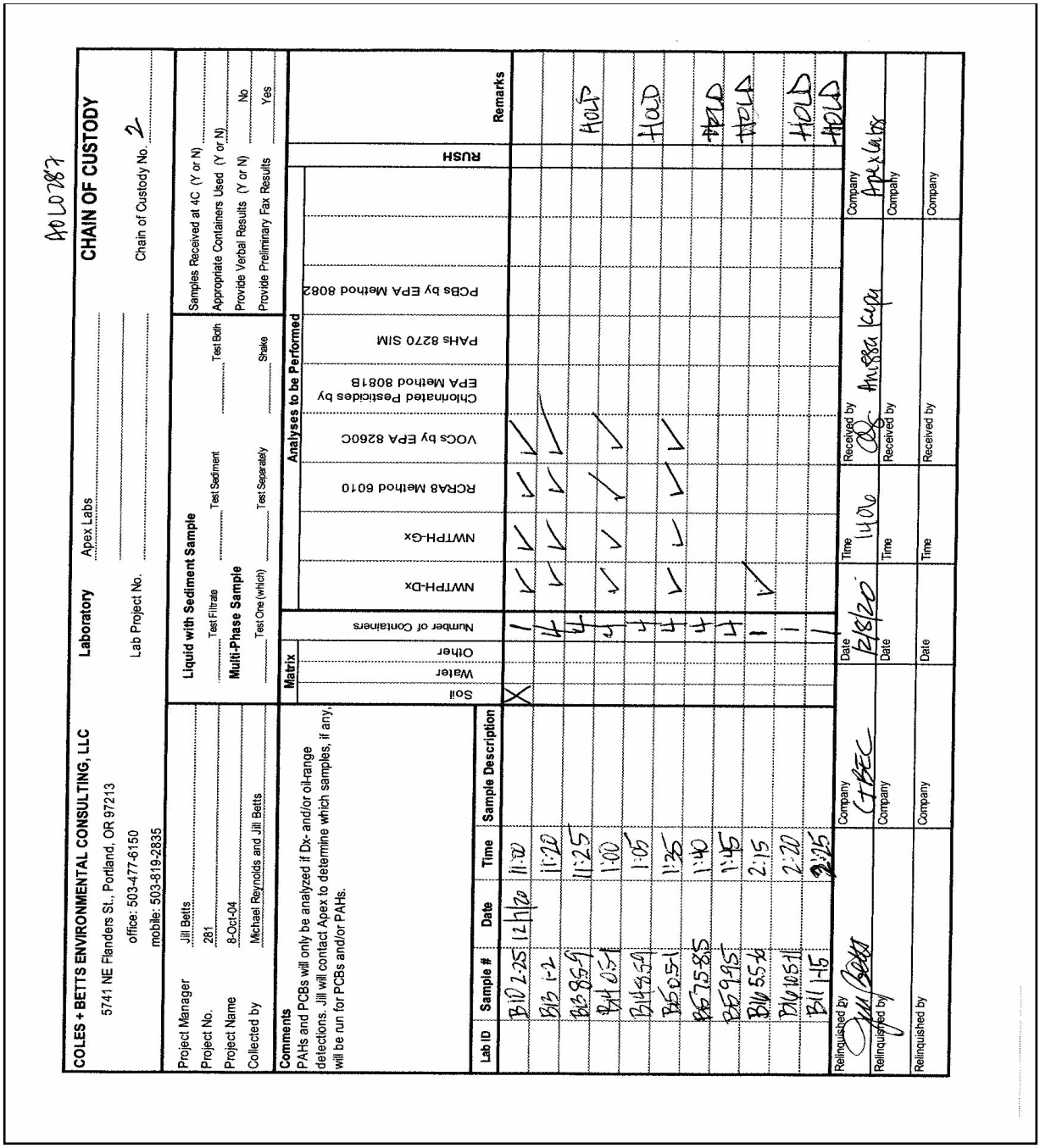
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**



A0L0287

CHAIN OF CUSTODY

COLES + BETTS ENVIRONMENTAL CONSULTING, LLC
5741 NE Flanders St., Portland, OR 97213
office: 503-477-6150
mobile: 503-819-2835

Laboratory Apex Labs
Lab Project No.
Chain of Custody No. 2

Project Manager: Jill Betts
Project No.: 281
Project Name: 8-Oct-04
Collected by: Michael Reynolds and Jill Betts

Liquid with Sediment Sample — Test Filtrate / Test Sediment / Test Both
Multi-Phase Sample — Test One (which) / Test Separately / Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N) — No
Provide Preliminary Fax Results — Yes

Comments
PAHs and PCBs will only be analyzed if Dx- and/or oil-range detections. Jill will contact Apex to determine which samples, if any, will be run for PCBs and/or PAHs.

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Water	Other	Number of Containers	Analyses to be Performed: NWTPH-Dx	NWTPH-Gx	RCRA8 Method 6010	VOCs by EPA 8260C	Chlorinated Pesticides by EPA Method 8081B	PAHs 8270 SIM	PCBs by EPA Method 8082	RUSH	Remarks
	BID 2-25	12/1/20	11:00		X			1	✓	✓	✓	✓					
	BG 1-2		11:20					4	✓	✓	✓	✓	✓				
	BG 85-1		11:25					4	✓	✓	✓	✓	✓				HOLD
	BH 05-1		1:00					4	✓	✓	✓	✓	✓				
	BH 55-1		1:05					4	✓	✓	✓	✓	✓				HOLD
	BG 05-1		1:25					4	✓	✓	✓	✓	✓				
	BG 75.85		1:40					4									HOLD
	BG 95		1:45					4									HOLD
	BH 55-2		2:15					1	✓								
	BH 105-1		2:20					1									HOLD
	BH 1-15		2:25					1									HOLD

Relinquished by: Jill Betts	Company: CBEC	Date: 12/8/20	Time: 1400	Received by: Amber Lugo
Relinquished by:	Company:	Date:	Time:	Received by:
Relinquished by:	Company:	Date:	Time:	Received by:

Company: Apex Labs

Apex Laboratories

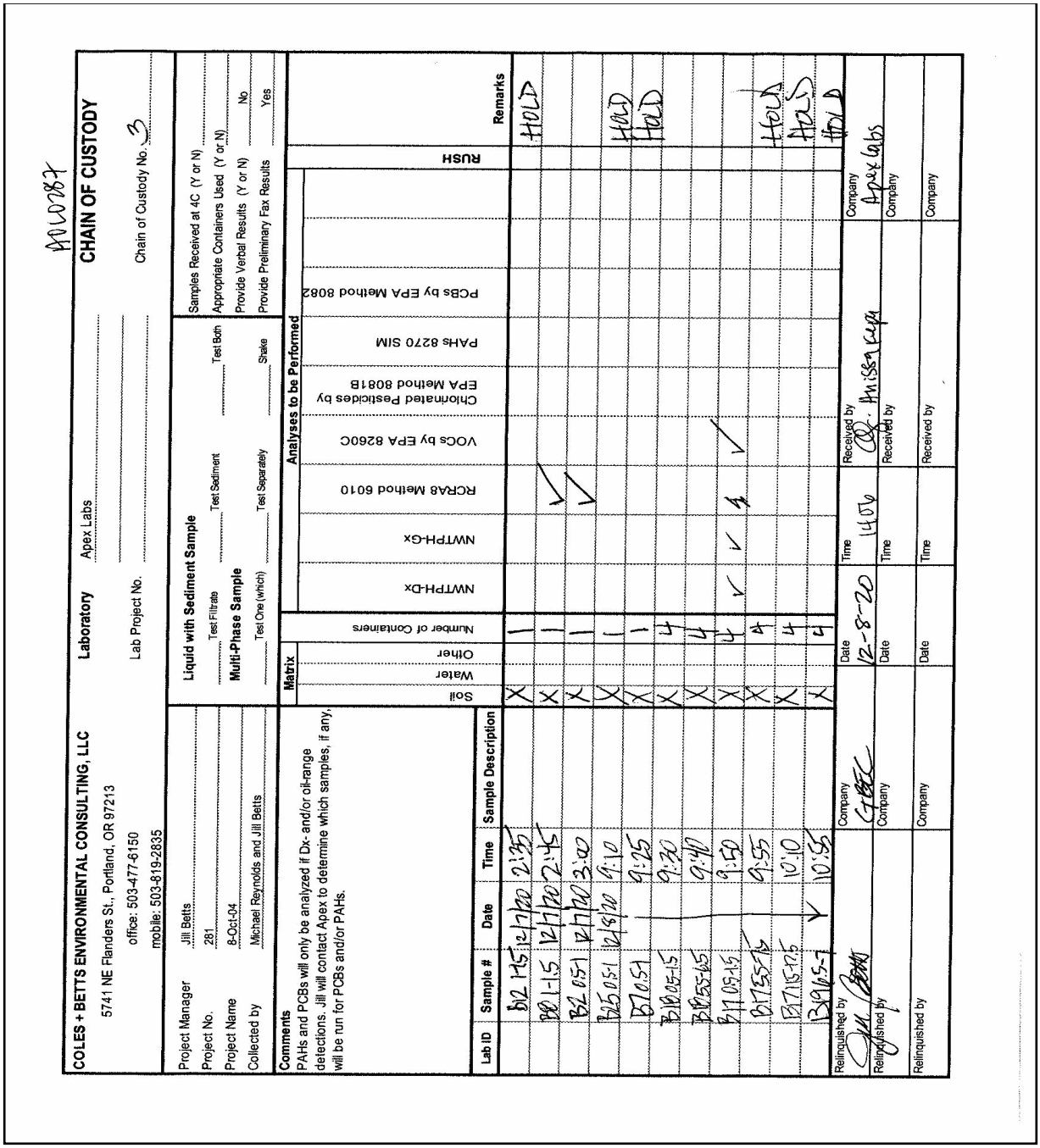
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**



A0L0287

CHAIN OF CUSTODY

COLES + BETTS ENVIRONMENTAL CONSULTING, LLC
5741 NE Flanders St., Portland, OR 97213
office: 503-477-6150
mobile: 503-819-2835

Laboratory: Apex Labs
Lab Project No.:
Chain of Custody No. 3

Project Manager: Jill Betts
Project No.: 281
Project Name: 8-Oct-04
Collected by: Michael Reynolds and Jill Betts

Liquid with Sediment Sample — Test Filtrate ____ Test Sediment ____ Test Both ____
Multi-Phase Sample — Test One (which) ____ Test Separately ____ Shake ____

Samples Received at 4C (Y or N) ____
Appropriate Containers Used (Y or N) ____
Provide Verbal Results (Y or N) ____ No
Provide Preliminary Fax Results ____ Yes

Comments
PAHs and PCBs will only be analyzed if Dx- and/or oil-range detections. Jill will contact Apex to determine which samples, if any, will be run for PCBs and/or PAHs.

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Water	Other	Number of Containers	Analyses to be Performed: NWTPH-Dx	NWTPH-Gx	RCRA8 Method 6010	VOCs by EPA 8260C	Chlorinated Pesticides by EPA Method 8081B	PAHs 8270 SIM	PCBs by EPA Method 8082	RUSH	Remarks
	B2 1-1.5	12/7/20	2:35		X			1									HOLD
	B8 1-1.5	12/7/20	2:45		X			1			✓						
	B2 0.5-1	12/7/20	3:00		X			1			✓						
	B5 0.5-1	12/8/20	9:10		X			1									HOLD
	B7 0.5-1		9:25		X			1									HOLD
	B10 0.5-1.5		9:30		X			4									
	B10 5.5-6.5		9:40		X			4									
	B11 0.5-1.5		9:50		X			4	✓	✓	4	✓					
	B17 5.5-6.5		9:55		X			4									HOLD
	B17 15-16		10:10		X			4									HOLD
	B19 0.5-1	✓	10:55		X			4									HOLD

Relinquished by	Company	Date	Time	Received by / Company
		12-8-20	1407	Apex Labs
Relinquished by	Company	Date	Time	Received by / Company
Relinquished by	Company	Date	Time	Received by / 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.

Darrell Auvil, Project Manager

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

A0L0287

CHAIN OF CUSTODY

Chain of Custody No. 4

COLES + BETTS ENVIRONMENTAL CONSULTING, LLC
5741 NE Flanders St., Portland, OR 97213
office: 503-477-6150
mobile: 503-819-2835

Laboratory Apex Labs
Lab Project No.

Project Manager: Jill Betts
Project No.: 281
Project Name: 8-Oct-04
Collected by: Michael Reynolds and Jill Betts

Liquid with Sediment Sample — Test Filtrate / Test Sediment / Test Both
Multi-Phase Sample — Test One (which) / Test Separately / Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N) — No
Provide Preliminary Fax Results — Yes

Comments
PAHs and PCBs will only be analyzed if Dx- and/or oil-range detections. Jill will contact Apex to determine which samples, if any, will be run for PCBs and/or PAHs.

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Water	Other	Number of Containers	NWTPH-Dx	NWTPH-Gx	RCRA8 Method 6010	VOCs by EPA 8260C	Chlorinated Pesticides by EPA Method 8081B	PAHs 8270 SIM	PCBs by EPA Method 8082	RUSH	Remarks
	B1A 1-2	12.8.20	11:00		X			4									HOLD
	B2D 0.7-1.5	↓	11:20					1	↓	.							
	B1B 12-14.5		11:35					1	.								HOLD
	B2A 1-2		11:45					1									HOLD
	B2E 2.5-3.5		12:00					1									HOLD
	B2B 2-2.5		12:10					1									HOLD
	B2C 15-16	↓	12:35		↓			2									HOLD

Relinquished by	Company	Date	Time	Received by
	CBEC	12-8-20	1400	
Relinquished by	Company	Date	Time	Received by
Relinquished by	Company	Date	Time	Received by

Company: Apex Labs — Received by: Melissa Lupa

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.

Darrell Auvil, Project Manager

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Coles & Betts Environmental Consulting	Project: **281**	
5741 NE Flanders Street	Project Number: **281**	**Report ID:**
Portland, OR 97213	Project Manager: **Jill Betts**	**A0L0287 - 02 10 21 0942**

APEX LABS COOLER RECEIPT FORM

Client: Coles & Betts Environmental Consulting, LLC Element WO#: A0 L0287

Project/Project #: #281

Delivery Info:

Date/time received: 12/8/20 @ 1406 By: AKK

Delivered by: Apex____Client X ESS____FedEx____UPS____Swift____Senvoy____SDS____Other_____

Cooler Inspection Date/time inspected: 12/8/20 @ 1410 By: AKK

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)	6.0	3.2	5.7				
Received on ice? (Y/N)	Y	Y	Y				
Temp. blanks? (Y/N)	Y	Y	Y				
Ice type: (Gel/Real/Other)	Gel	Gel	Gel				
Condition:	Good	Good	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: 12/8/20 @ 1833 By: AKK

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? Yes ___ No X Comments: B180.5-1.5 ID on 1l jars + 2l2 VOAs reads B18, matched by DIT. B18 5.5-6.5 ID on jar reads 5.5-6.5,

COC/container discrepancies form initiated? Yes ___ No 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: matched by DIT. B19 6.5-7 ID on Cnts. reacl B19 6.5-7.5.

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

APPENDIX C

Property Demolition, Temporary Grading Plan, Final Site Grading Plan, and Erosion and Sediment Control Plan (ESCP)

NOTICE TO EXCAVATORS:

ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.
(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-232-1987).

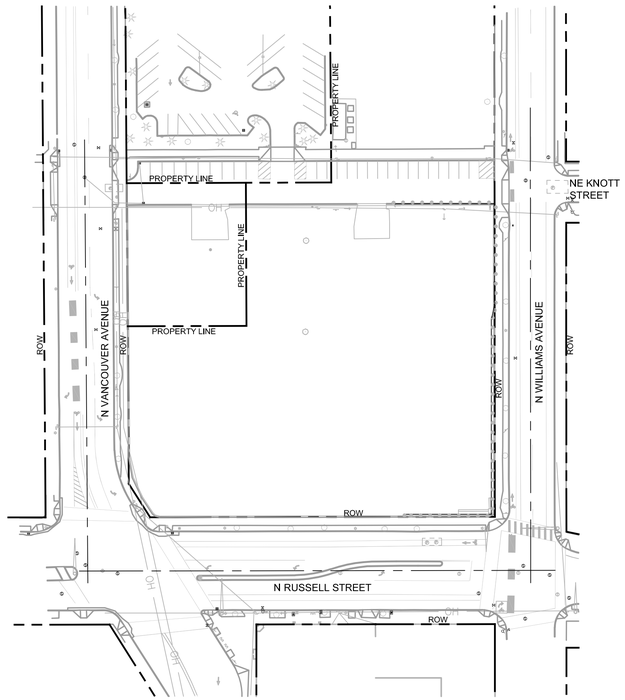
POTENTIAL UNDERGROUND FACILITY OWNERS

Dig Safely.

Call the Oregon One-Call Center
DIAL 811 or 1-800-332-2344

EMERGENCY TELEPHONE NUMBERS

NW NATURAL GAS	
M-F 7am-6pm	503-226-4211 Ext.4313
AFTER HOURS	503-226-4211
PGE	503-464-7777
CENTURYLINK	1-800-573-1311
CITY BUREAU OF MAINTENANCE	503-823-1700
CITY WATER	503-823-4874
VERIZON	1-800-483-1000



PROPERTY DIAGRAM PRIOR TO LOT CONFIRMATION

SCALE: 1"=60'

N

GENERAL NOTES

1. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF THE CITY OF PORTLAND, THE OREGON STRUCTURAL SPECIALTY CODE (BUILDING CODE), OREGON PLUMBING SPECIALTY CODE (PLUMBING CODE), AND THE OREGON FIRE CODE (FIRE CODE), LATEST EDITIONS.
2. ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION AND COMPLETION OF THE WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
3. ALL EXCAVATORS MUST COMPLY WITH THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER, INCLUDING NOTIFICATION OF ALL OWNERS OF UNDERGROUND UTILITIES AT LEAST 48 BUSINESS DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090 AND ORS 757.541 TO 757.57. THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-232-1987 AND THE LOCAL "CALL 48 HOURS BEFORE YOU DIG NUMBER" IS 503-246-6699.
4. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS IS FOR INFORMATION ONLY AND IS NOT GUARANTEED TO BE ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS OF ALL UNDERGROUND UTILITY CONNECTION POINTS PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF VEGA CIVIL ENGINEERING, LLC. POTHOLE ALL CROSSINGS AS NECESSARY BEFORE CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
5. VEGA CIVIL ENGINEERING, LLC. ASSUMES NO RESPONSIBILITY FOR ANY DISCREPANCIES ENCOUNTERED BETWEEN THE CURRENT FIELD CONDITIONS AND THE INFORMATION SHOWN ON THE SURVEY MAP. THE CONTRACTOR IS RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
6. REQUIRED SOIL SPECIAL INSPECTIONS PER THE REQUIREMENT OF TABLE 1705.6 AND THE GEOTECHNICAL REPORT.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	CATCH BASIN	
	UTILITY POLE	
	SIGN	
	TREE	
	PROPERTY LINE	
	CENTERLINE	
	EDGE OF PAVEMENT	
	CURB	
X" SD	STORM DRAIN	
	SANITARY SEWER	
X" CS	COMBINED SEWER	
X" W	WATER	
X" W	FIRE	
OH	OVERHEAD UTILITY	
PWR	UNDERGROUND POWER	
162	MINOR CONTOUR	162
160	MAJOR CONTOUR	160

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	LT	LEFT
BC	BOTTOM OF CURB	MAX	MAXIMUM
BGS	BELOW GROUND SURFACE	MIN	MINIMUM
BPZ	BACK OF PEDESTRIAN ZONE	NO	NUMBER
		NTS	NOT TO SCALE
BFZ	BUILDING FRONTAGE ZONE	ODOT	OREGON DEPARTMENT OF TRANSPORTATION
CL	CENTERLINE		
CONC	CONCRETE	PBOT	PORTLAND BUREAU OF TRANSPORTATION
CONST	CONSTRUCT		
COP	CITY OF PORTLAND	PC	POINT OF CURVATURE
d	DISTANCE	PROP	PROPOSED
DTL	DETAIL	PT	POINT OF TANGENCY
EXIST/(E)	EXISTING	PVMT	PAVEMENT
EG	EXISTING GROUND	PZ	PEDESTRIAN ZONE
FF	FINISHED FLOOR	R	RADIUS
FS	FIRE SERVICE	ROW	RIGHT OF WAY
FPZ	FRONT OF PEDESTRIAN ZONE	RT	RIGHT
		SD	STORM DRAIN
FZ	FURNISHING ZONE	STA	STATION
G/GUT	GUTTER	STD	STANDARD
GB	GRADE BREAK	TC	TOP OF CURB
H	HORIZONTAL	TP	TOP OF PAVEMENT
HP	HIGH POINT	TYP	TYPICAL
IE	INVERT ELEVATION	V	VERTICAL
L	LENGTH		

SHEET INDEX

VEGA
CIVIL ENGINEERING LLC
503.662.1901 | WWW.VEGACIVIL.COM

REGISTERED PROFESSIONAL ENGINEER
96,077
OREGON
JULY 12, 2005
MARTHA WILLIAMSON
EXPIRES 6-30-2026

WILLIAMS & RUSSELL

NE KNOTT ST & N WILLIAMS AVE
PORTLAND, OR 97227

SITE DEVELOPMENT PERMIT

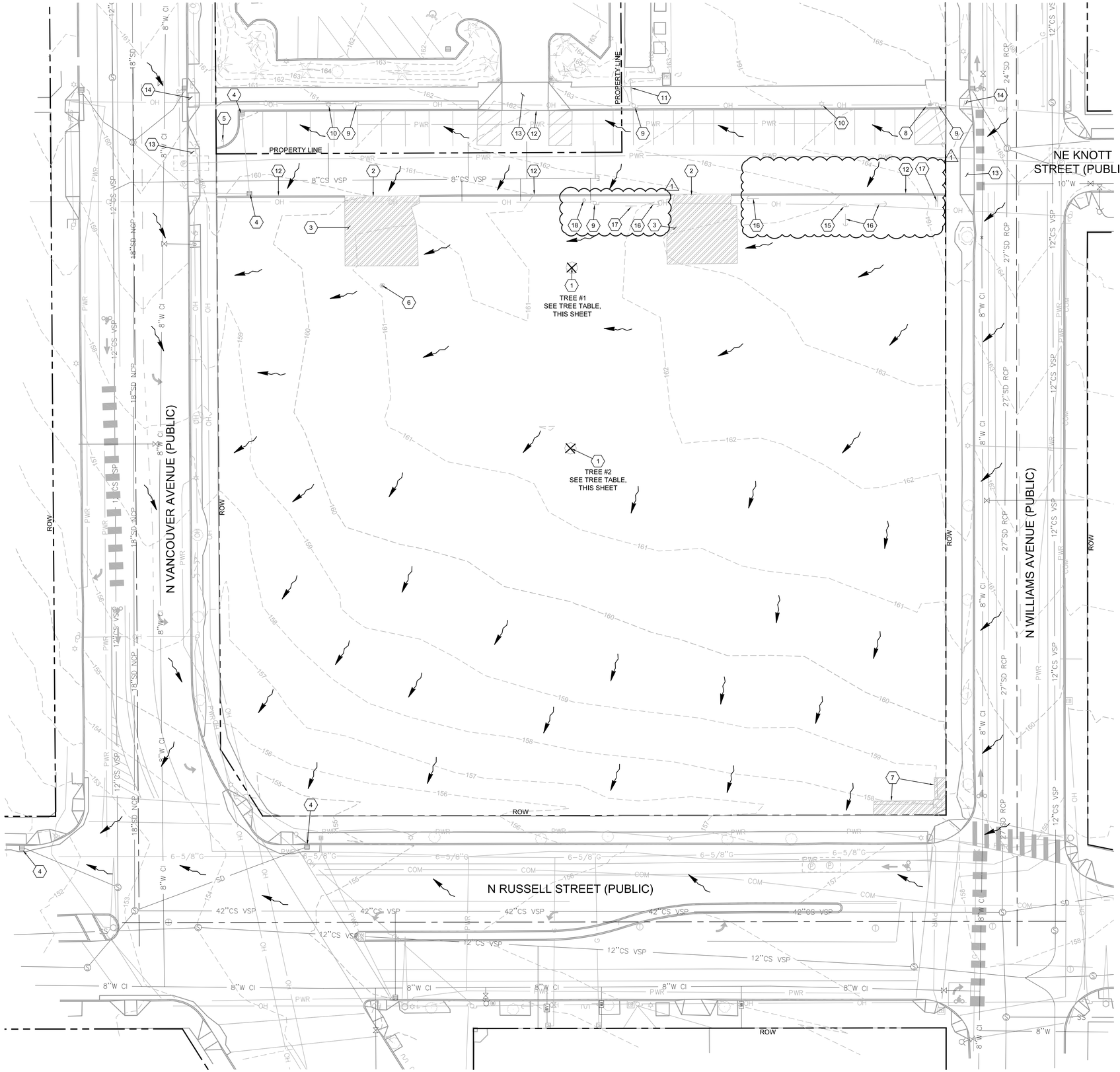
DRAWN BY: IMR	CHECKED BY: MSW
DATE: 08/20/2024	
REVISION:	

SHEET TITLE:

CIVIL NOTES

SHEET NUMBER:

C001



DEMOLITION PLAN
SCALE: 1"=20'

GENERAL NOTES

1. ALL WORK IN THE PUBLIC RIGHT OF WAY UNDER SEPARATE PERMIT.
2. SEE SEPARATE 1200C PERMIT FOR EROSION AND SEDIMENT CONTROL.
3. NO DEWATERING. ALL EXCESS STORMWATER WILL BE HAULED OFF-SITE.
4. NO STOCKPILING. ALL CUT TO BE HAULED AND DISPOSED OF OFF-SITE TO HILLSBORO LANDFILL.

LEGEND

- EXISTING DRAINAGE FLOW DIRECTION
- 163 EXISTING CONTOUR
- PROPERTY LINE
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- SAWCUT
- DEMOLISH EXISTING ASPHALT PAVING, CONCRETE, AND CURBS

SHEET NOTES

1. REMOVE EXISTING TREE
2. SAWCUT
3. REMOVE EXISTING ON-SITE PAVING
4. EXISTING INLET TO BE PROTECTED
5. PROTECT EXISTING SIGN AND SIGN POST
6. REMOVE EXISTING BOLLARD
7. EXISTING WALL TO BE REMOVED
8. PROTECT EXISTING UTILITY VAULT
9. PROTECT EXISTING UTILITY POLE
10. PROTECT EXISTING SITE LIGHT
11. PROTECT EXISTING GUY WIRE ANCHOR
12. PROTECT EXISTING CURB
13. PROTECT EXISTING DRIVEWAY
14. PROTECT EXISTING ADA RAMP
15. EXISTING UTILITY POLE TO BE REMOVED. COORDINATE WITH PPL (1)
16. EXISTING GUY WIRE ANCHOR TO BE REMOVED. COORDINATE WITH PPL
17. REMOVE EXISTING SIGN AND SIGN POST
18. REMOVE EXISTING SITE LIGHT

DEWATERING NOTES

CONSTRUCTION DEWATERING NOT AUTHORIZED.

IF REQUIRED: BATCH DISCHARGE AUTHORIZATION PERMIT IS REQUIRED FOR TEMPORARY DISCHARGES OF GROUNDWATER OR CONSTRUCTION RELATED STORMWATER (CHANNELIZED, COLLECTED AND/OR PUMPED) TO THE CITY'S PUBLIC SANITARY OR STORM SEWER SYSTEM. IF DE-WATERING TO A CITY SANITARY OR STORM SEWER SYSTEM IS NECESSARY, PRE-AUTHORIZATION MUST BE OBTAINED FROM THE BUREAU OF ENVIRONMENTAL SERVICES AT BATCHDISCHARGE@PORTLANDOREGON.GOV (OR CALL 503-823-7026).

DEWATERING FORM:
HTTPS://WWW.PORTLAND.GOV/SITES/DEFAULT/FILES/2021/2020-SCM-FORM-CONSTRUCTION-BATCH-DISCHARGE.PDF

24 HOUR EMERGENCY CONTACT

NAME: NATE REFF
COMPANY: COLAS CONSTRUCTION
PHONE: (503) 292-4025

TREE TABLE (1)

#	SPECIES	DBH (IN)
1	APPLE	31
2	CHERRY	31

N

0 20 40
1 INCH = 20 FEET

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REGISTERED PROFESSIONAL ENGINEER
86,077
OREGON
JULY 12, 2005
MARTHA WILLIAMSON

EXPIRES 6-30-2026

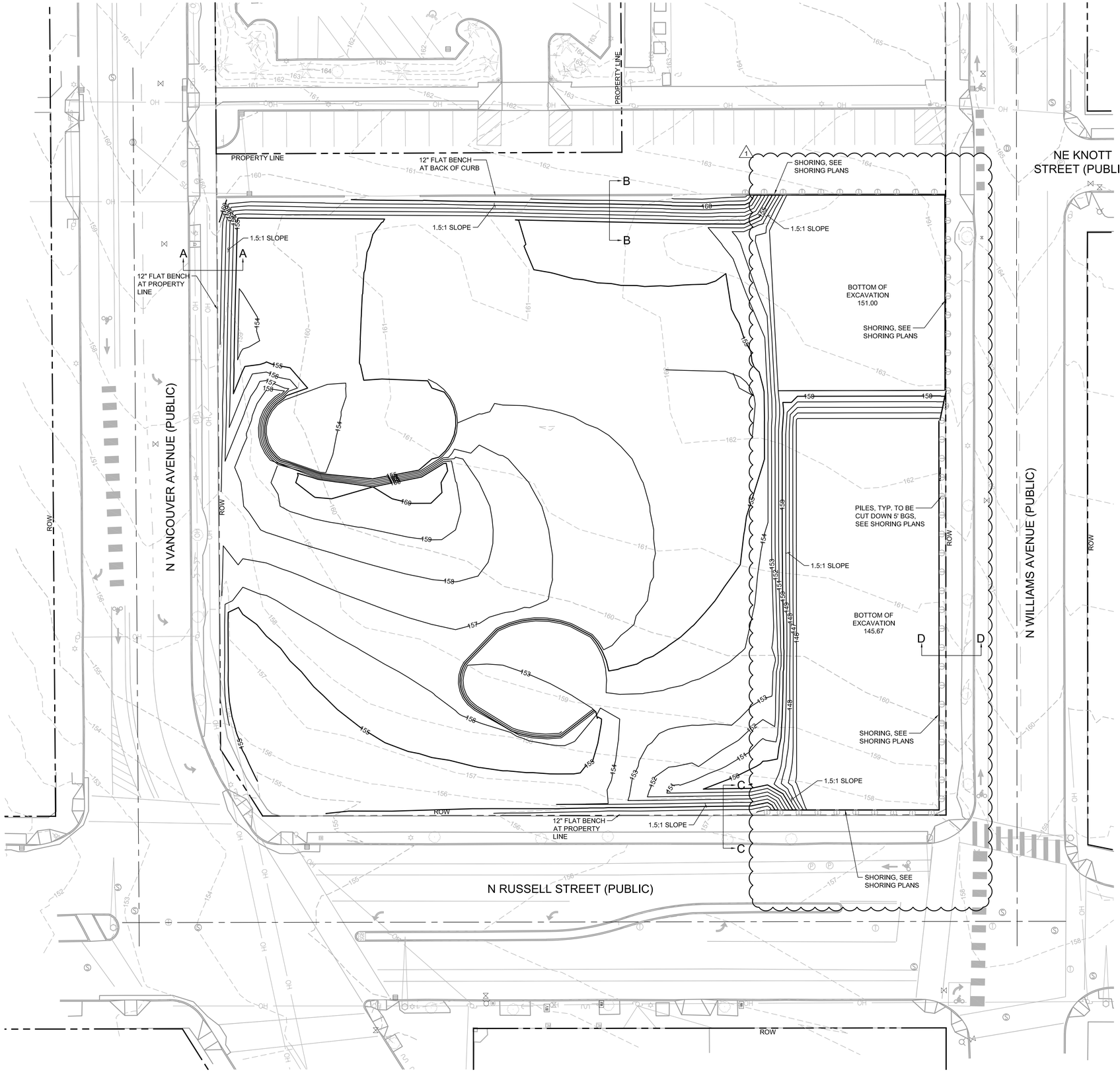
WILLIAMS & RUSSELL
NE KNOTT ST & N WILLIAMS AVE
PORTLAND, OR 97227

SITE DEVELOPMENT PERMIT

DRAWN BY: IMR	CHECKED BY: MSW
DATE: 08/20/2024	
REVISION:	
1 REVISION 1	11.25.2024

SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C050



TEMPORARY GRADING PLAN
SCALE: 1"=20'

GENERAL NOTES

1. ALL WORK IN THE PUBLIC RIGHT OF WAY UNDER SEPARATE PERMIT.
2. SEE SEPARATE 1200C PERMIT FOR EROSION AND SEDIMENT CONTROL.
3. NO DEWATERING. ALL EXCESS STORMWATER WILL BE HAULED OFF-SITE.
4. NO STOCKPILING. ALL CUT TO BE HAULED AND DISPOSED OF OFF-SITE TO HILLSBORO LANDFILL.

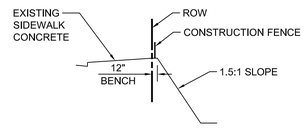
PROPERTY ID:
R251395, R251394, R251391

SITE AREAS:

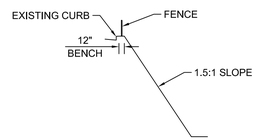
EXISTING IMPERVIOUS TO REMAIN:	5,739 SF
PERVIOUS:	80,120 SF
TOTAL:	85,859 SF

LEGEND

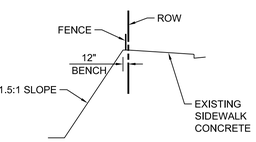
- 163 — EXISTING CONTOUR
- 160 — PROPOSED CONTOUR
- PROPERTY LINE
- EXISTING TREE TO REMAIN
- SAWCUT



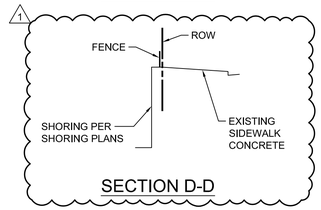
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

N

0 20 40
1 INCH = 20 FEET

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REGISTERED PROFESSIONAL ENGINEER
86,077
OREGON
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WILLIAMS & RUSSELL

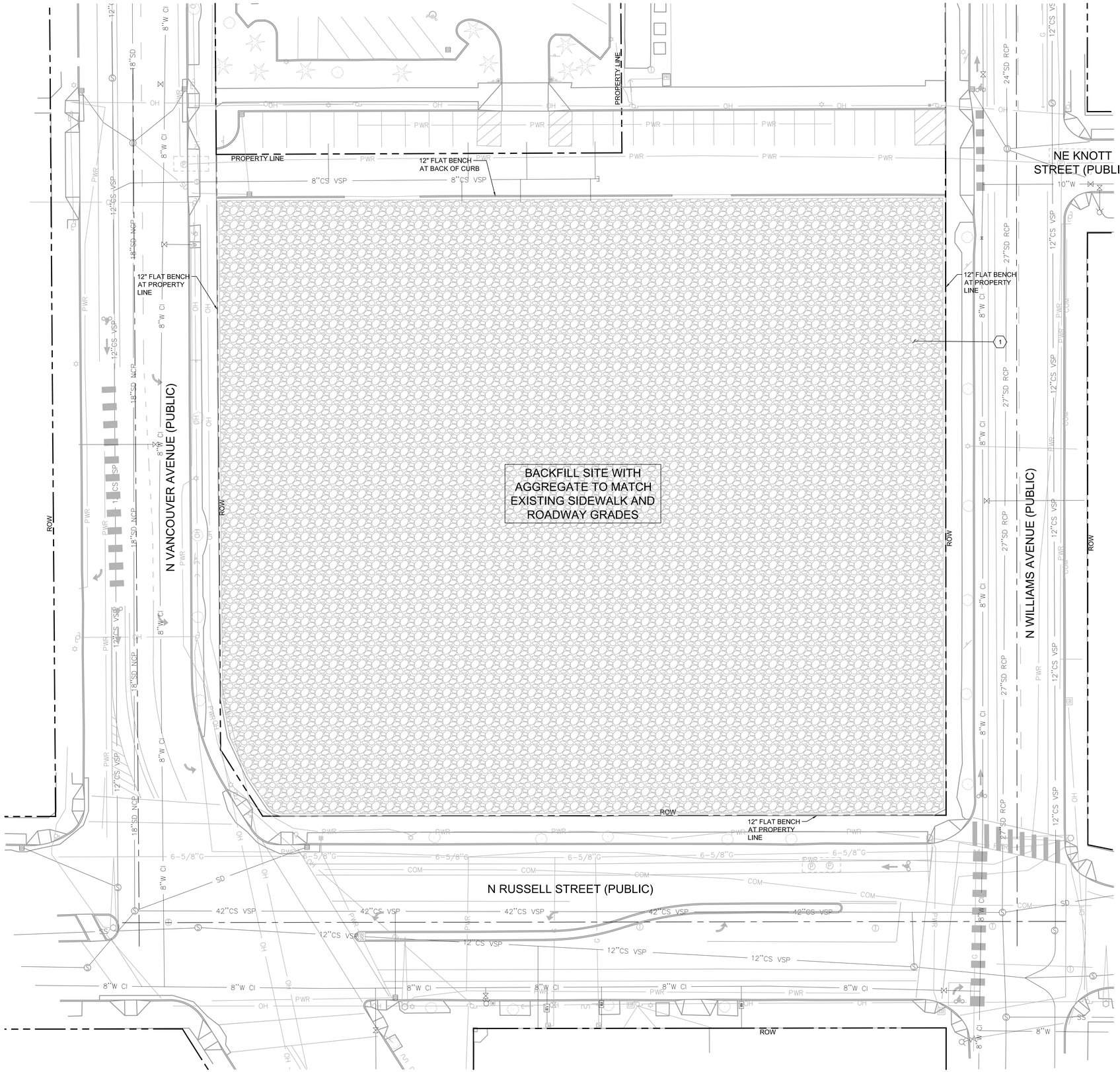
NE KNOTT ST & N WILLIAMS AVE
PORTLAND, OR 97227

SITE DEVELOPMENT PERMIT

DRAWN BY: IMR	CHECKED BY: MSW
DATE: 08/20/2024	
REVISION:	
1 REVISION 1	11.25.2024

SHEET TITLE:
TEMPORARY GRADING PLAN

SHEET NUMBER:
C100



FINAL SITE PLAN
SCALE: 1"=20'

GENERAL NOTES

1. ALL WORK IN THE PUBLIC RIGHT OF WAY UNDER SEPARATE PERMIT.
2. SEE SEPARATE 1200C PERMIT FOR EROSION AND SEDIMENT CONTROL.
3. NO DEWATERING. ALL EXCESS STORMWATER WILL BE HAULED OFF-SITE.
4. NO STOCKPILING. ALL CUT TO BE HAULED AND DISPOSED OF OFF-SITE TO HILLSBORO LANDFILL.
5. BACKFILL SITE WITH AGGREGATE TO MATCH EXISTING SIDEWALK AND ROADWAY GRADES.

LEGEND

- 163 — EXISTING CONTOUR
- 160 — PROPOSED CONTOUR
- PROPERTY LINE
- EXISTING TREE TO REMAIN
- SAWCUT
- AREA OF AGGREGATE BACKFILL

SHEET NOTES

1. BACKFILL SITE WITH AGGREGATE TO MATCH EXISTING SIDEWALK AND ROADWAY GRADES.

N

0 20 40
1 INCH = 20 FEET

VEGA
CIVIL ENGINEERING LLC
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REGISTERED PROFESSIONAL ENGINEER
86,077
OREGON
JULY 12, 2005
MARTHA WILLIAMSON

EXPIRES 6-30-2026

WILLIAMS & RUSSELL

NE KNOTT ST & N WILLIAMS AVE
PORTLAND, OR 97227

SITE DEVELOPMENT PERMIT

DRAWN BY: IMR	CHECKED BY: MSW
DATE: 08/20/2024	
REVISION:	

SHEET TITLE:

FINAL SITE PLAN

SHEET NUMBER:

C101

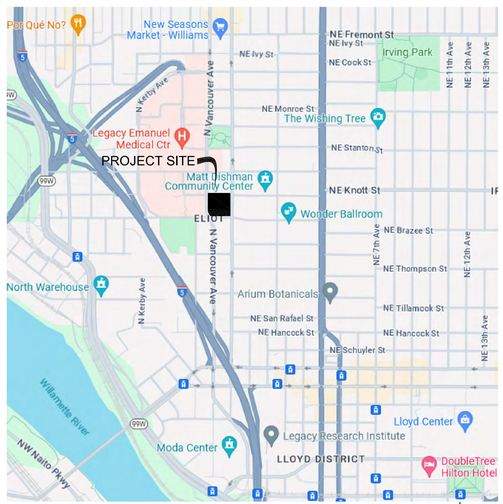
EROSION AND SEDIMENT CONTROL PLAN (ESCP)

STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES

1. ONCE KNOWN, INCLUDE A LIST OF ALL CONTRACTORS THAT WILL ENGAGE IN CONSTRUCTION ACTIVITIES ON SITE, AND THE AREAS OF THE SITE WHERE THE CONTRACTOR(S) WILL ENGAGE IN CONSTRUCTION ACTIVITIES. REVISE THE LIST AS APPROPRIATE UNTIL PERMIT COVERAGE IS TERMINATED (SECTION 4.4.C.I). IN ADDITION, INCLUDE A LIST OF ALL PERSONNEL (BY NAME AND POSITION) THAT ARE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF STORMWATER CONTROL MEASURES (E.G. ESCP DEVELOPER, BMP INSTALLER (SEE SECTION 4.10), AS WELL AS THEIR INDIVIDUAL RESPONSIBILITIES. (SECTION 4.4.C.II)
2. VISUAL MONITORING INSPECTION REPORTS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SECTION 6.5)
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SECTION 6.5.Q)
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. (SECTION 4.7)
5. THE PERMIT REGISTRANT MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SECTIONS 4 AND 4.11)
6. THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SECTION 4.8)
7. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SECTION 4.9)
8. SEQUENCE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SECTION 2.2.2)
9. CREATE SMOOTH SURFACES BETWEEN SOIL SURFACE AND EROSION AND SEDIMENT CONTROLS TO PREVENT STORMWATER FROM BYPASSING CONTROLS AND PONDING. (SECTION 2.2.3)
10. IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SECTION 2.2.1)
11. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SECTION 2.2.5)
12. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (SECTION 2.2.4)
13. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND
14. BARRIERS PRIOR TO LAND DISTURBANCE. (SECTIONS 2.1.3)
15. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SECTIONS 2.1.1. AND 2.2.16)
16. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SECTIONS 2.2,6 AND 2.2,13)
17. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SECTION 2.2.14)
18. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATIONS MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS.(SECTIONS 2.2.20 AND 2.2.21)
19. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SECTION 2.3.7)
20. KEEP WASTE CONTAINER LIDS CLOSED WHEN NOT IN USE AND CLOSE LIDS AT THE END OF THE BUSINESS DAY FOR THOSE CONTAINERS THAT ARE ACTIVELY USED THROUGHOUT THE DAY. FOR WASTE CONTAINERS THAT DO NOT HAVE LIDS, PROVIDE EITHER (1) COVER (E.G., A TARP, PLASTIC SHEETING, TEMPORARY ROOF) TO PREVENT EXPOSURE OF WASTES TO PRECIPITATION, OR (2) A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS (E.G., SECONDARY CONTAINMENT). (SECTION 2.3.7)
21. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND- DISTURBING ACTIVITIES. (SECTION 2.2.7)
22. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SECTION 2.2.7.F)
23. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SECTIONS 1.5 AND 2.3.9)
24. ENSURE THAT STEEP SLOPE AREAS WHERE CONSTRUCTION ACTIVITIES ARE NOT OCCURRING ARE NOT DISTURBED. (SECTION 2.2.10)
25. PREVENT SOIL COMPACTION IN AREAS WHERE POST-CONSTRUCTION INFILTRATION FACILITIES ARE TO BE INSTALLED. (SECTION 2.2.12)
26. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SECTIONS 2.2.15 AND 2.3)
27. PROVIDE PLANS FOR SEDIMENTATION BASINS THAT HAVE BEEN DESIGNED PER SECTION 2.2.17 AND STAMPED BY AN OREGON PROFESSIONAL ENGINEER. (SEE SECTION 2.2.17.A)
28. IF ENGINEERED SOILS ARE USED ON SITE, A SEDIMENTATION BASIN/IMPOUNDMENT MUST BE INSTALLED. (SEE SECTIONS 2.2.17 AND 2.2.18)
29. PROVIDE A DEWATERING PLAN FOR ACCUMULATED WATER FROM PRECIPITATION AND UNCONTAMINATED GROUNDWATER SEEPAGE DUE TO SHALLOW EXCAVATION ACTIVITIES. (SEE SECTION 2.4)
30. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SECTION 2.3)
31. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SECTION 2.2.9)
32. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SECTION 2.3.5)
33. IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN ENVIRONMENTAL MANAGEMENT PLAN APPROVAL FROM DEQ BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SECTION 1.2.9)
34. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SECTION 2.2)
35. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SECTION 2.2.8)
36. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SECTION 2.1.5.B)
37. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SECTION 2.1.5.C)
38. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SECTION 2.1.5.D)
39. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIMEFRAME. (SECTION 2.2.19.A)
40. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SECTION 2.2.19)
41. DOCUMENT ANY PORTION(S) OF THE SITE WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED OR WILL BE TEMPORARILY INACTIVE FOR 14 OR MORE CALENDAR DAYS. (SECTION 6.5.F.)
42. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SECTION 2.2.20)
43. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS NEEDED FOR LONG TERM USE FOLLOWING TERMINATION OF PERM

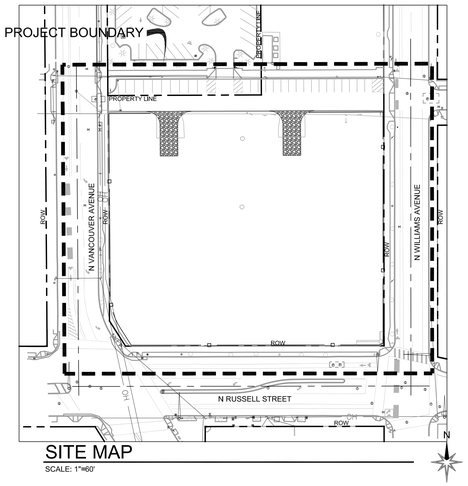
PORTLAND EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES

1. PRECONSTRUCTION EROSION & SEDIMENT CONTROL MEASURES INSPECTION: CALL FOR CITY OF PORTLAND EROSION CONTROL INSPECTION 503-823-7000. REQUEST AN IVR INSPECTION #200 AFTER INITIAL, TEMPORARY EROSION, SEDIMENT AND POLLUTANT CONTROL MEASURES HAVE BEEN PUT IN-PLACE AND PRIOR TO ANY OTHER GROUND DISTURBANCE. IDENTIFY THE RESPONSIBLE PARTY FOR INSPECTION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES DURING THE PRE-CONSTRUCTION MEETING.
2. POST SIGNAGE: POST SIGNAGE ON THE SITE OF THE PERMITTED GROUND DISTURBING ACTIVITY THAT IDENTIFIES THE CITY'S EROSION CONTROL COMPLAINT HOTLINE NUMBER. EROSION CONTROL HOTLINE, 503-823-CODE (2633). THE SIGNAGE ON THE SITE MUST BE CLEARLY VISIBLE FROM THE RIGHT-OF-WAY. THE SIGN SHALL BE AT LEAST 18" BY 18" AND MADE OF MATERIALS THAT SHALL WITHSTAND WEATHER FOR THE DURATION OF THE PROJECT. LETTERING SHALL BE AT LEAST 3" HIGH AND EASILY READABLE. (PCC 10.30.020). ALL SITE PUBLIC NOTIFICATION SIGNS REQUIRED BY PCC 10.30.020 SHALL BE MAINTAINED TO REMAIN EASILY READABLE FROM THE PUBLIC RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE GROUND DISTURBING ACTIVITY.
3. STREET SWEEPING: ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO THE STORMWATER COLLECTION SYSTEM SHALL BE REMOVED OR CLEANED UP IMMEDIATELY, AND NO LATER THAN END OF THE WORKDAY. THE USE OF WATER TRUCKS TO WASH THE MATERIAL OFF THE ROADWAY IS NOT ALLOWED. WATER TRUCKS MAY BE USED IMMEDIATELY BEFORE SWEEPERS OR VACUUM SYSTEMS TO LOOSEN SEDIMENT, PROVIDED THAT DISCHARGE TO THE STORMWATER COLLECTION SYSTEM DOES NOT OCCUR.



VICINITY MAP

SCALE: NTS



SITE MAP

SCALE: 1"=60'

ATTENTION EXCAVATORS

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AND EXCAVATION. CALL 503-246-6699.

OWNER/DEVELOPER

BLACK BUSINESS HUB, LLC
6607 NE MARTIN LUTHER KING JR. BLVD
PORTLAND, OR 97211
(503) 334-1777
CONTACT: JOE SWANK

CIVIL ENGINEER

VEGA CIVIL ENGINEERING, LLC
1300 SE STARK STREET #201
PORTLAND, OR 97214
(503) 662-1901
CONTACT: MARTHA WILLIAMSON

PROPERTY DESCRIPTION:

TAX LOT 1800, SITUATED IN SECTION 27, TOWNSHIP 1 NORTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, PORTLAND, MULTNOMAH COUNTY, OR.

LAT. 45.541512
LONG. -122.667407

SURVEYOR

NORTHWEST SURVEYING, INC.
1815 NW 169TH PLACE, SUITE 2090
BEAVERTON, OR 97006
(503) 848-2127
CONTACT: SCOTT F. FIELD

PROJECT LOCATION:

FULL CITY BLOCK BOUNDED BY N RUSSELL STREET TO THE SOUTH, NE WILLIAMS AVENUE TO THE EAST, NE VANCOUVER AVENUE TO THE WEST, AND VACATED NE KNOTT STREET TO THE NORTH. THE SITE IS LOCATED IN THE CITY OF PORTLAND, MULTNOMAH COUNTY, OR.

PERMITEE'S SITE INSPECTOR

NAME: JESSI RUNYAN
COMPANY: WILDWOOD ENVIRONMENTAL
PHONE: (503) 484-0989
E-MAIL: JESSI@WILDWOODNW.COM
DESCRIPTION OF EXPERIENCE: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL #B7DDB977)

ESCP DESIGN AND INSTALLATION PERSONNEL

ISABEL RUMMELL, CIVIL DESIGNER (VEGA CIVIL ENGINEERING, LLC)
ESCP CIVIL DESIGN

ESCP INSTALLATION & MAINTENANCE PERSONNEL TO BE DETERMINED AT A LATER DATE

DEQ PERMIT NUMBER

#71365

STORMWATER CONTROLS

ALL STORMWATER ON-SITE TO INFILTRATE IN LANDSCAPING AREAS

HOURS OF OPERATION

7:00 AM - 7:00 PM

SEDIMENT TRACK-OUT CONTROLS

TEMPORARY STABILIZED CONSTRUCTION ACCESS WILL BE IMPLEMENTED BY THE CONTRACTOR TO REMOVE SEDIMENT PRIOR TO VEHICLE EXIT. STRAW WATTLES WILL BE IMPLEMENTED AT THE PROJECT PERIMETER AS WELL AS INLET PROTECTION.

CONTRACTORS TO PERFORM WORK ON SITE*

*SITE SUBCONTRACTORS TO BE DETERMINED AT A LATER DATE

GENERAL CONTRACTOR, COLAS CONSTRUCTION
(503) 292-4025
CONTACT: NATE REFF

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

THE EXISTING SITE IS UNDEVELOPED LAND WITH A FEW TREES AND VARIOUS OTHER SITE VEGETATION AND A SMALL PARKING LOT.

DEVELOPED CONDITIONS

THE DEVELOPED SITE WILL BE REGRADED TO REMOVED CONTAMINATED SOILS AND PREPARE THE SITE FOR FUTURE DEVELOPMENT.

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

CLEARING AND DEMOLITION: MARCH 2025 - APRIL 2025
GRADING: MARCH 2025 - MAY 2025
FINAL STABILIZATION: JUNE 2025

ESTIMATE OF TOTAL PERMITTED PROJECT AREA

TOTAL SITE AREA = 85,859 SF = 1.97 ACRES

TOTAL DISTURBED AREA**

TOTAL DISTURBED AREA = 85,859 SF = 1.97 ACRES

**LAND EXPECTED TO BE DISTURBED AT ONE TIME = 1 ACRE

SITE SOIL CLASSIFICATION

A LAYER OF UNDOCUMENTED FILL CONSISTING OF SILT AND SAND INTERMIXED WITH DEBRIS AND ORGANIC MATERIAL WAS ENCOUNTERED ACROSS THE SITE AT DEPTHS 3 TO 15 FEET BGS.

BENEATH THE FILL IS INTERBEDDED ALLUVIAL DEPOSITS OF SILT AND SAND UP TO THE MAXIMUM EXPLORED DEPTH OF 41.5' BGS.

CONTAMINATED SOIL

CONTAMINATED SOIL WAS PRESENT IN THE GEOTECHNICAL INVESTIGATION. A PHASE II ENVIRONMENTAL SITE ASSESSMENT HAS BEEN COMPLETED. A CONTAMINATED MEDIA MANAGEMENT PLAN (CMMP) HAS BEEN PREPARED TO PROTECT HEALTH AND SAFETY OF CONSTRUCTION AND EXCAVATION WORKERS AND DESCRIBES HOW TO MANAGE CONTAMINATED MEDIA.

RECEIVING WATERBODIES

WILLAMETTE RIVER WATERSHED.

*PERCHED GROUNDWATER WAS ENCOUNTERED DURING THE GEOTECHNICAL INVESTIGATION AT DEPTHS ~30' BGS. CONSTRUCTION ACTIVITIES UNDER THIS PERMIT WILL REMAIN ABOVE ~15' BGS. CONSTRUCTION DEWATERING IS NOT ANTICIPATED.

IMPAIRED WATERBODIES

303 (D) LISTED WATERBODIES: WILLAMETTE RIVER IS IMPAIRED.

EXISTING AND PROPOSED STORMWATER MANAGEMENT

THE EXISTING SITE GENERALLY DRAINS FROM THE NORTHEAST TO SOUTHWEST AND INFILTRATES INTO ON-SITE VEGETATED AREAS.

ALL PROPOSED ON-SITE SURFACE RUNOFF FLOWS FROM NORTHEAST TO SOUTHWEST AND INFILTRATES INTO ON-SITE LANDSCAPING AREAS.

DEWATERING PLAN

IT IS ASSUMED GROUNDWATER WILL NOT BE ENCOUNTERED. SHOULD GROUNDWATER BE ENCOUNTERED DURING THE TIME OF CONSTRUCTION, CONTRACTOR TO REFER TO DEWATERING NOTES ON PAGE C403.

ENGINEERED SOILS

THERE IS NO ANTICIPATED USE OF ENGINEERED SOILS ON THIS SITE.

SPILL-PREVENTION PROCEDURES

THE CONTRACTOR MAINTAINS A SAFETY AND HEALTH PROGRAM, INCLUDING A PROJECT HAZARD COMMUNICATION PROGRAM, THAT CONFORMS TO OSHA STANDARD NO. 1910.120 FOR SPILL PREVENTION CONTROL AND COUNTERMEASURES, PROCEDURES FOR EXPEDITIOUSLY STOPPING, CONTAINING AND CLEANING UP SPILLS, LEAKS, AND OTHER RELEASES, AND WASTE MANAGEMENT PROCEDURES, OF WHICH A COPY IS KEPT ON SITE.

DISCHARGES OF TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE ARE PROHIBITED. WHERE A LEAK, SPILL, OR OTHER RELEASE CONTAINING A HAZARDOUS SUBSTANCE OR OIL OCCURS DURING A 24-HOUR PERIOD, THE REGISTRANT MUST NOTIFY THE OREGON EMERGENCY RESPONSE SYSTEM AT (800) 452-0311 AS SOON AS THE REGISTRANT HAS KNOWLEDGE OF THE RELEASE.

POLLUTANT-GENERATING ACTIVITES

ACTIVITY	POLLUTANT	DESCRIPTION
EARTHWORK	SEDIMENT	EROSION TO BE MITIGATED PER BMPS BELOW

AUTHORIZED NON-STORMWATER DISCHARGES

DISCHARGE	DESCRIPTION
EQUIPMENT WASH WATER	WATER USED TO WASH EQUIPMENT AND VEHICLES (EXCLUDING THE ENGINE, UNDERCARRIAGE, AND WHEELS/TIRES) PROVIDED THERE IS NO DISCHARGE OF SOAPS, SOLVENTS, OR DETERGENTS USED
DUST CONTROL WATER	WATER USED TO CONTROL DUST

BMP MATRIX FOR CONSTRUCTION

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

	CLEARING & DEMOLITION	MASS GRADING	UTILITY INSTALLATION	PAVING & VERTICAL CONSTRUCTION	FINAL STABILIZATION
	(3/25 - 4/25)	(03/25 - 05/25)	NA	NA	(6/25)
BIOBAGS					
CHECK DAMS					
COMPOST BERM					
COMPOST BLANKETS					
COMPOST SOCKS					
CONCRETE TRUCK WASHOUT					
CONSTRUCTION ENTRANCE	X	X			
DEWATERING					
DRAINAGE SWALES					
DUST CONTROL					
EARTH DIKES (STABILIZED)					
ENERGY DISSIPATERS					
EROSION CONTROL BLANKETS & MATS					
GROUND COVER					
HYDROSEEDING					
INLET PROTECTION	X	X			X
MULCHES					
MYCORRHIZAE/BIOFERTILIZERS					
NATURAL BUFFER ZONE					
ORANGE FENCING					
OUTLET PROTECTION					
PERMANENT SEEDING AND PLANTING					
PIPE SLOPE DRAINS					
PLASTIC SHEETING					
PRESERVE EXISTING VEGETATION					
SEDIMENT FENCING	X	X			X
SEDIMENT BARRIER					
SEDIMENT TRAP					
SODDING					
SOIL TACKIFIERS					
STORM DRAIN INLET PROTECTION					
STRAW WATTLES		X			
SURFACE ROUGHENING					
TEMPORARY DIVERSION DIKES					
TEMPORARY SEDIMENTATION BASINS					
PERMANENT SEDIMENTATION BASINS					
TEMPORARY SEEDING AND PLANTING					
TREATMENT SYSTEM (O&M PLAN REQUIRED)					
UNPAVED ROADS GRAVELED					
VEGETATIVE BUFFER STRIPS					
POLLUTION PREVENTION					
PROPER SIGNAGE	X	X			X
HAZARD WASTE MANAGEMENT	X	X			X
SPILL KIT ONSITE	X	X			X
CONCRETE WASHOUT AREA					

INSPECTION FREQUENCY

PER NPDES CONSTRUCTION STORMWATER DISCHARGE PERMIT 12/15/2020,
SCHEDULE B MINIMUM MONITORING AND RECORDKEEPING REQUIREMENTS, SECTION 6.

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	-ON INITIAL DATE THAT LAND DISTURBANCE ACTIVITIES COMMENCE. -WITHIN 24 HOURS OF ANY STORM EVENT, INCLUDING RUNOFF FROM SNOW MELT, THAT RESULTS IN DISCHARGE FROM THE SITE. -AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
2. INACTIVE PERIODS GREATER THAN 14 CONSECUTIVE CALENDAR DAYS	WHERE STABILIZATION STEPS IN 2.2.20 HAVE BEEN COMPLETED, FREQUENCY MAY BE REDUCED TO: -TWICE PER MONTH FOR THE FIRST MONTH, -NO LESS THAN 14 CALENDAR DAYS APART, -THEN ONCE PER MONTH AND INCREASED TO THAT REQUIRED IN SECTION 6.2 IF CONSTRUCTION ACTIVITY RESUMES IN A STABILIZED AREA. WHERE FINAL STABILIZATION HAS BEEN ACHIEVED FOR DISTURBED PORTIONS OF "LINEAR CONSTRUCTION SITES" PER SECTION 2.2.21 AND CONSTRUCTION CONTINUES ON OTHER PARTS OF SITE, FREQUENCY MAY BE REDUCED TO: -TWICE PER MONTH FOR THE FIRST MONTH, -NO LESS THAN 14 CALENDAR DAYS APART, -IN ANY AREA OF THE SITE WHERE STABILIZATION STEPS ON 2.2.20 HAVE BEEN COMPLETED. -AFTER THE FIRST MONTH, INSPECT ONCE MORE WITHIN 24 HOURS OF ANY STORM EVENT LEADING TO DISCHARGE FROM THE SITE.
3. PERIODS WHERE THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER	IF SAFE, ACCESSIBLE, AND PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT DISCHARGE POINT OR DOWNSTREAM LOCATION OF THE RECEIVING WATERBODY.
4. PERIODS WHERE CONSTRUCTION ACTIVITIES ARE SUSPENDED DUE TO RUNOFF BEING UNLIKELY DUE TO CONTINUOUS FROZEN CONDITIONS, LAND DISTURBANCES HAVE BEEN SUSPENDED, AND ALL DISTURBED AREAS HAVE BEEN STABILIZED IN ACCORDANCE WITH SECTION 2.2.20.	IF CONSTRUCTION ACTIVITIES ARE SUSPENDED DUE TO FROZEN CONDITIONS, VISUAL MONITORING INSPECTIONS MAY BE TEMPORARILY SUSPENDED ON THE SITE UNTIL THAWING BEGINS.
5. PERIODS WHERE CONSTRUCTION ACTIVITIES ARE CONDUCTED DUE TO RUNOFF BEING UNLIKELY DUE TO CONTINUOUS FROZEN CONDITIONS, AND DISTURBED AREAS OF THE SITE HAVE BEEN STABILIZED PER SECTION 2.2.20.	IF CONSTRUCTION ACTIVITIES ARE SUSPENDED DUE TO FROZEN CONDITIONS, VISUAL MONITORING INSPECTIONS MAY BE REDUCED TO ONCE PER MONTH.

SHEET INDEX

ARCHITECT

CONSULTANT

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WILLIAMS & RUSSELL
NE KNOTT ST & N WILLIAMS AVE
PORTLAND, OR 97227

STAMP

REGISTERED PROFESSIONAL ENGINEER
6,071
OREGON
JULY 12, 2005
MARTHA WILLIAMSON
EXPIRES 6-30-2026

REVISIONS

ORIGINAL DOCUMENT SIZE
36" x 48"

PHASE
EROSION AND SEDIMENT CONTROL PLAN

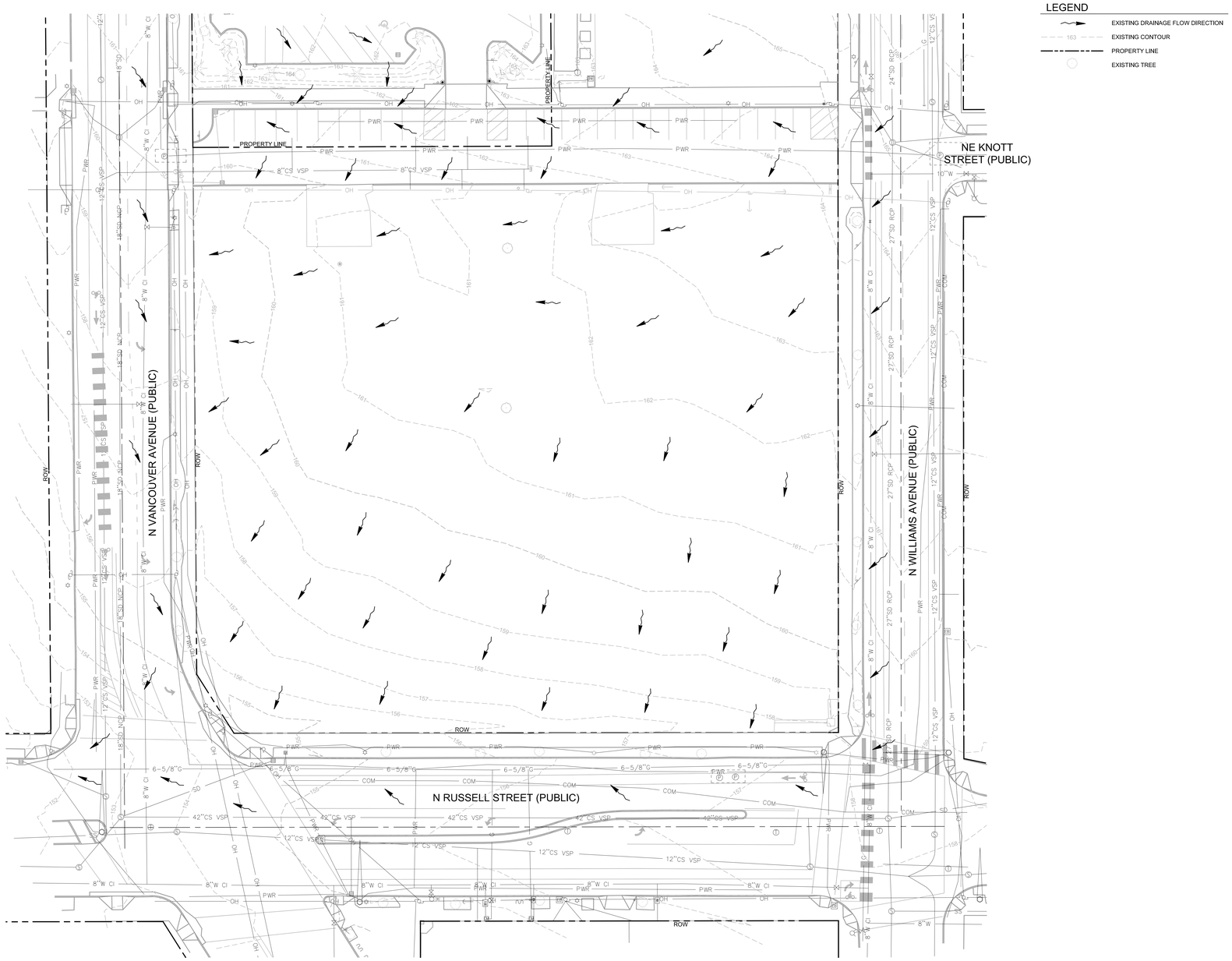
DATE
08/20/2024

PROJECT NUMBER

SCALE

SHEET TITLE
ESCP COVER SHEET

C400



ESCP EXISTING CONDITIONS
SCALE: 1"=20'

N

0 20 40
1 INCH = 20 FEET

ARCHITECT

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SCALE

SHEET TITLE
ESCP EXISTING CONDITIONS

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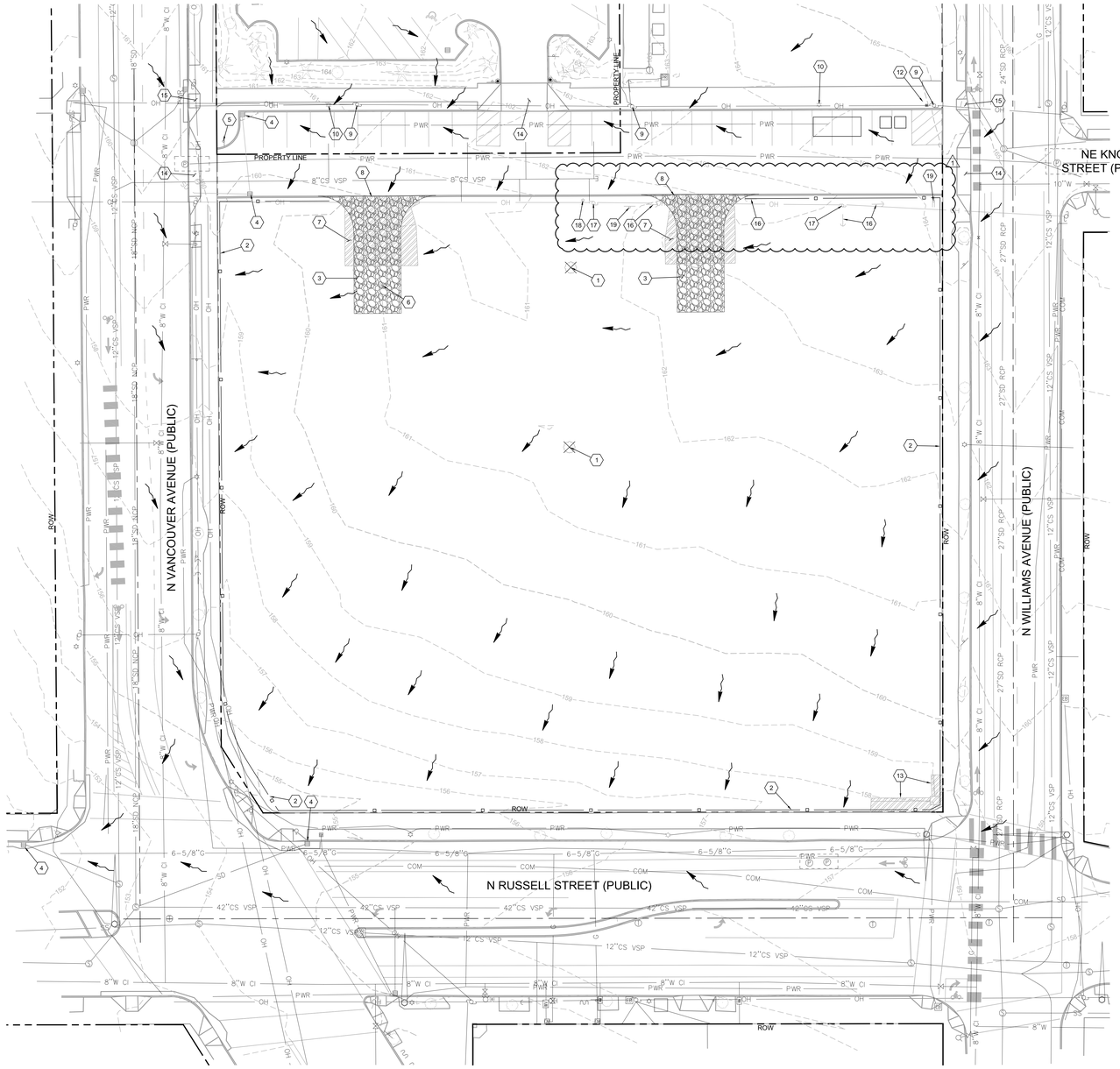

ESCP CLEARING & DEMOLITION PHASE
SCALE: 1"=20'

GENERAL NOTES

1. ALL WORK IN THE PUBLIC RIGHT OF WAY UNDER SEPARATE PERMIT.

LEGEND

- EXISTING DRAINAGE FLOW DIRECTION
- 163 EXISTING CONTOUR
- PROPERTY LINE
- SEDIMENT FENCE
- EXISTING TREE TO REMAIN
- SAWCUT
- EXISTING ASPHALT PAVING, CONCRETE, AND CURBS TO BE DEMOLISHED
- EXISTING TREE TO BE REMOVED
- SANITARY FACILITY
- WASTE CONTROL STRUCTURE

SHEET NOTES

1. EXISTING TREE TO BE REMOVED
2. INSTALL SEDIMENT FENCE PER DETAIL 3, SHEET C405
3. INSTALL STABILIZED CONSTRUCTION ACCESS PER DETAIL 1, SHEET C405
4. PROTECT EXISTING INLET. INSTALL FILTER FABRIC INLET PROTECTION PER DETAIL 2, SHEET C405 AND MAINTAIN FOR DURATION OF WORK
5. PROTECT EXISTING SIGN
6. EXISTING BOLLARD TO BE REMOVED
7. EXISTING ON-SITE PAVING TO BE REMOVED
8. SAWCUT
9. PROTECT EXISTING UTILITY POLE
10. PROTECT EXISTING SITE LIGHT
11. PROTECT EXISTING GUY WIRE
12. PROTECT EXISTING UTILITY VAULT
13. EXISTING WALL TO BE REMOVED
14. PROTECT EXISTING DRIVEWAY
15. PROTECT EXISTING ADA RAMP
16. EXISTING GUY WIRE TO BE REMOVED
17. EXISTING UTILITY POLE TO BE REMOVED
18. EXISTING SITE LIGHT TO BE REMOVED
19. EXISTING SITE SIGN TO BE REMOVED

CLEARING AND DEMO NOTES

1. ALL BASE ESC MEASURES PERIMETER SEDIMENT CONTROLS MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIALS, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND BE MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING AND VACUUMING MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.
6. ALL WORK IN PUBLIC RIGHT-OF-WAY UNDER SEPARATE PERMIT.
7. REMOVE ALL EXISTING ONSITE CONDUITS UNLESS NOTED OTHERWISE ON THIS PLAN. COORDINATE WITH EARTH ENGINEERS INC PRIOR TO REMOVAL.
8. CLEAR ALL EXISTING ONSITE SHRUBBERY, HEDGES, AND ANY ADDITIONAL VEGETATION UNLESS NOTED OTHERWISE ON THIS PLAN.

N

0 20 40
1 INCH = 20 FEET

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EXPIRES 6-30-2026

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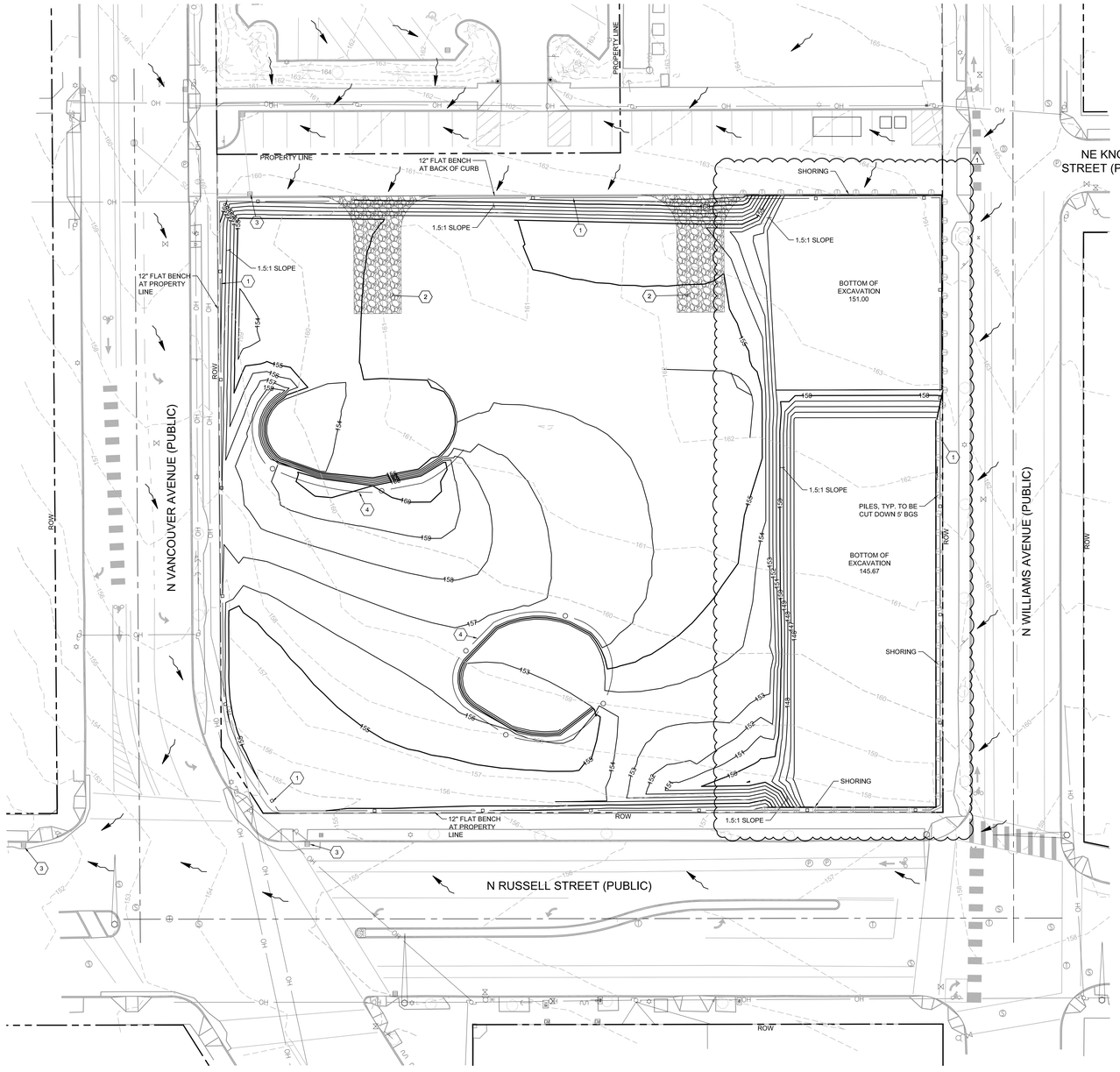
ESCP CLEARING & DEMOLITION PHASE

C402

GRADING ESC NOTES

1. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
   - A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES.
   - B. DWARF GRASS MIX (MIN. 100LB/AC.)
     - DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
     - CREEPING RED FESCUE (20% BY WEIGHT)
   - C. STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC)
     - ANNUAL RYEGRASS (40% BY WEIGHT)
     - TURF-TYPE FESCUE (60% BY WEIGHT)
2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUNOFF VELOCITY.
3. LONG-TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR OTHER APPROPRIATE MEASURES.
7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND BE MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING AND VACUUMING MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
10. SATURATED MATERIALS THAT ARE HAULED OFFSITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORMWATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN *50'* FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN OFF INTO THE STORM WATER SYSTEM.
14. USE BMPS SUCH AS CHECK DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUNOFF FROM REACHING DISCHARGE POINTS.
15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.



ESCP MASS GRADING PHASE
SCALE: 1"=20'

GENERAL NOTES

1. ALL EXCAVATED SOIL WILL BE HAULED OFF SITE.
2. SITE TO BE BACKFILLED WITH AGGREGATE TO MATCH EXISTING SIDEWALK AND ROADWAY GRADES.

LEGEND

- DRAINAGE FLOW DIRECTION
- 163 — EXISTING CONTOUR
- 160 — PROPOSED CONTOUR
- PROPERTY LINE
- SEDIMENT FENCE
- EXISTING TREE TO REMAIN
- SAWCUT
- SANITARY FACILITY
- WASTE CONTROL STRUCTURE

SHEET NOTES

1. INSTALL SEDIMENT FENCE PER DETAIL 3, SHEET C405
2. INSTALL STABILIZED CONSTRUCTION ACCESS PER DETAIL 1, SHEET C405
3. PROTECT EXISTING INLET. INSTALL FILTER FABRIC INLET PROTECTION PER DETAIL 2, SHEET C405 AND MAINTAIN FOR DURATION OF WORK
4. INSTALL WATTLES ON SLOPES PER DETAIL 4, SHEET C405

DEWATERING NOTES

REGISTRANT MUST COMPLY WITH THE FOLLOWING REQUIREMENTS TO PREVENT THE DISCHARGE OF POLLUTANTS IN GROUNDWATER OR ACCUMULATED STORMWATER THAT IS REMOVED FROM EXCAVATIONS, TRENCHES, FOUNDATIONS, VAULTS, OR OTHER SIMILAR POINTS OF ACCUMULATION.

A. TO THE EXTENT FEASIBLE, USE VEGETATED, UPLAND AREAS OF THE SITE TO INFILTRATE DEWATERING WATER BEFORE DISCHARGE. THE REGISTRANT IS PROHIBITED FROM USING WATERS OF THE STATE AS PART OF THE TREATMENT AREA;

B. IMPLEMENT THE APPROPRIATE CONTROL MEASURES FOR DEWATERING DISCHARGES TO PREVENT THE DISCHARGE OF POLLUTANTS;

C. DO NOT DISCHARGE VISIBLE FLOATING SOLIDS OR FOAM;

D. USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (SUCH AS A CARTRIDGE FILTER) THAT IS DESIGNED TO REMOVE OIL, GREASE, OR OTHER PRODUCTS IF DEWATERING WATER IS FOUND TO CONTAIN THESE MATERIALS;

E. AT ALL POINTS WHERE DEWATERING WATER IS DISCHARGED, COMPLY WITH THE VELOCITY DISSIPATION REQUIREMENTS;

F. WITH BACKWASH WATER, EITHER HAUL IT AWAY FOR DISPOSAL OR RETURN IT TO THE BEGINNING OF THE TREATMENT PROCESS; G. REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN THE PRESSURE DIFFERENTIAL EQUALS OR EXCEEDS THE MANUFACTURER'S SPECIFICATIONS;

H. IF THERE IS NO ALTERNATIVE OPTION, THE USE OF A SANITARY OR COMBINED SEWER DISCHARGE IS AUTHORIZED WITH LOCAL SEWER DISTRICT APPROVAL; AND

I. ACTIVE TREATMENT SYSTEMS FOR TURBIDITY OR ANY OTHER POLLUTANTS MUST BE DESIGNED AND STAMPED BY AN OREGON REGISTERED PROFESSIONAL ENGINEER.

1

CONSTRUCTION DEWATERING NOT AUTHORIZED.

IF REQUIRED: BATCH DISCHARGE AUTHORIZATION PERMIT IS REQUIRED FOR TEMPORARY DISCHARGES OF GROUNDWATER OR CONSTRUCTION RELATED STORMWATER (CHANNELIZED, COLLECTED AND/OR PUMPED) TO THE CITY'S PUBLIC SANITARY OR STORM SEWER SYSTEM. IF DE-WATERING TO A CITY SANITARY OR STORM SEWER SYSTEM IS NECESSARY, PRE-AUTHORIZATION MUST BE OBTAINED FROM THE BUREAU OF ENVIRONMENTAL SERVICES AT BATCHDISCHARGE@PORTLANDOREGON.GOV (OR CALL 503-823-7026).

DEWATERING FORM: HTTPS://WWW.PORTLAND.GOV/SITES/DEFAULT/FILES/2021/2020-SCM-FORM-CONSTRUCTION-BATCH-DISCHARGE.PDF

CONTAMINATED SOIL MANAGEMENT

NO STOCKPILING, ALL CUT TO BE HAULED AND DISPOSED OF OFF-SITE TO HILLSBORO LANDFILL.

STOCKPILES OF CONTAMINATED MEDIA MUST BE PROTECTIVE OF STORMWATER CONTACT AND ARE SUBJECT TO THE FOLLOWING MANAGEMENT STANDARDS:

- STOCKPILES OF SOIL MUST BE COVERED TO PROTECT MATERIALS FROM STORMWATER CONTACT.
- STOCKPILE PERIMETERS MUST HAVE A CONTAINMENT BARRIER ON ALL FOUR SIDES OF EVERY STOCKPILE.
- STOCKPILES OF SOIL MUST HAVE AN IMPERVIOUS LAYER UNDERNEATH THE STOCKPILE.
- SITE CONTROLS MUST BE EMPLOYED THAT PROTECT DRAG-OUT INTO A CITY STREET FROM THE DEVELOPMENT SITE AND DAY-TO-DAY OPERATIONS.

N

0 20 40
1 INCH = 20 FEET

ARCHITECT

CONSULTANT

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WILLIAMS & RUSSELL
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PHASE
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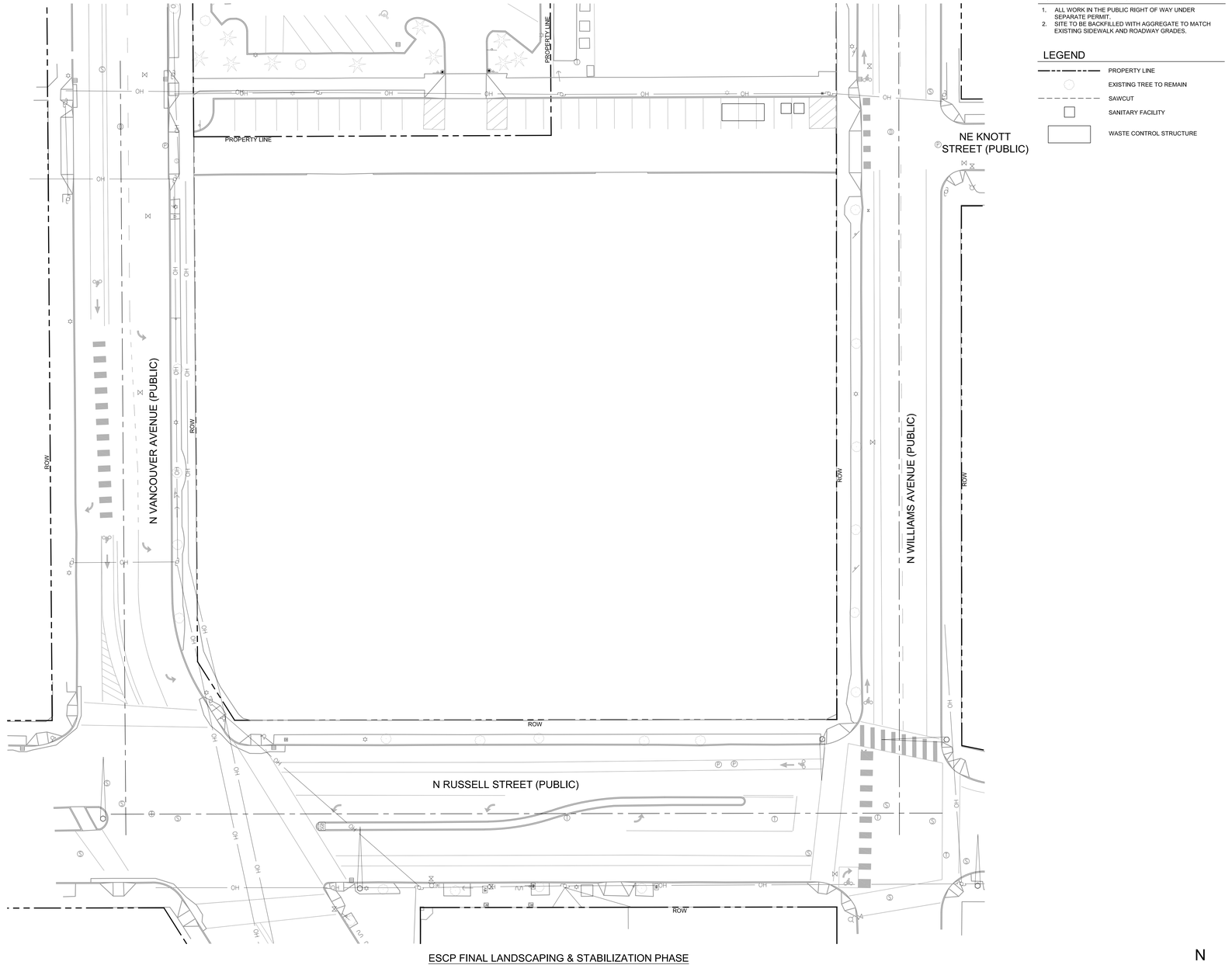
PROJECT NUMBER

SCALE

SHEET TITLE
ESCP MASS GRADING PHASE

C403



GENERAL NOTES

1. ALL WORK IN THE PUBLIC RIGHT OF WAY UNDER SEPARATE PERMIT.
2. SITE TO BE BACKFILLED WITH AGGREGATE TO MATCH EXISTING SIDEWALK AND ROADWAY GRADES.

LEGEND

- PROPERTY LINE
- EXISTING TREE TO REMAIN
- SAWCUT
- SANITARY FACILITY
- WASTE CONTROL STRUCTURE

ESCP FINAL LANDSCAPING & STABILIZATION PHASE
SCALE: 1"=20'

N

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ARCHITECT

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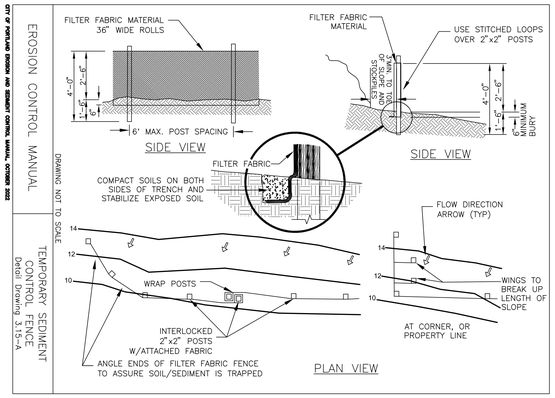
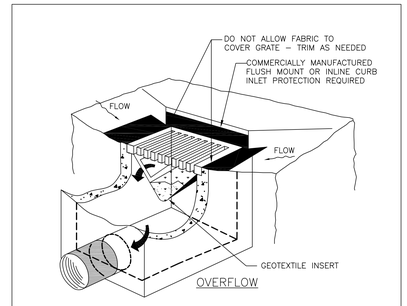


CITY OF PORTLAND EROSION AND SEDIMENT CONTROL MANUAL, OCTOBER 2022

EROSION CONTROL MANUAL | TEMPORARY SEDIMENT CONTROL FENCE Detail Drawing 3.15-A | DRAWING NOT TO SCALE

3 SEDIMENT FENCE
NTS



NOTE:
RECESSED CURB INLET MUST BE PROTECTED WHEN CURB INLET IS PRESENT. SIZE OF FILTER FABRIC INLET SACK TO BE DETERMINED BY MANUFACTURER.

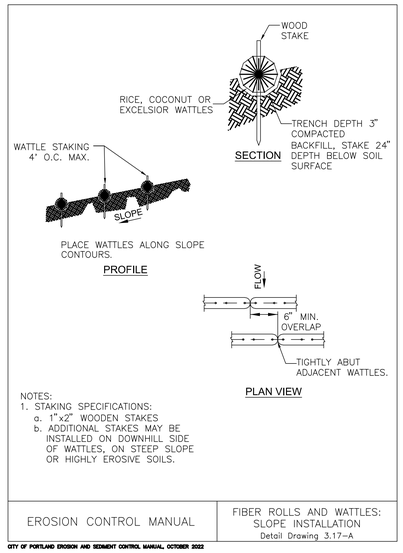
COMMERCIALLY MANUFACTURED DEVICES RATED AS "HIGH FLOW" REQUIRED IN LOCATIONS WHERE FREQUENT FLOODING OCCURS. GRATES THAT ARE NOT REMOVABLE MAY UTILIZE COMMERCIALLY MANUFACTURED "TOP OF GRATE" DEVICE.

DRAWING NOT TO SCALE

EROSION CONTROL MANUAL | STORM DRAIN INLET INSERT Detail Drawing 3.19-B

CITY OF PORTLAND EROSION AND SEDIMENT CONTROL MANUAL, OCTOBER 2022

2 FILTER FABRIC INLET PROTECTION
NTS

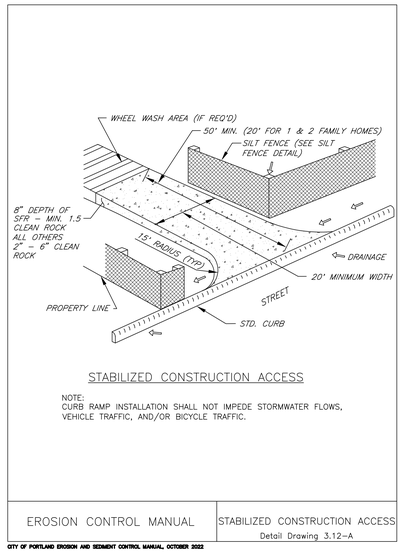


NOTES:
1. STAKING SPECIFICATIONS:
   a. 1"x2" WOODEN STAKES
   b. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY EROSIVE SOILS.

EROSION CONTROL MANUAL | FIBER ROLLS AND WATTLES: SLOPE INSTALLATION Detail Drawing 3.17-A

CITY OF PORTLAND EROSION AND SEDIMENT CONTROL MANUAL, OCTOBER 2022

4 WATTLE INSTALLATION ON SLOPES
NTS



STABILIZED CONSTRUCTION ACCESS

NOTE:
CURB RAMP INSTALLATION SHALL NOT IMPEDE STORMWATER FLOWS, VEHICLE TRAFFIC, AND/OR BICYCLE TRAFFIC.

EROSION CONTROL MANUAL | STABILIZED CONSTRUCTION ACCESS Detail Drawing 3.12-A

CITY OF PORTLAND EROSION AND SEDIMENT CONTROL MANUAL, OCTOBER 2022

1 STABILIZED CONSTRUCTION ACCESS
NTS

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