

SOURCE CONTROL EVALUATION – GROUNDWATER

Former Automatic Vending Company
5001 North Lagoon Avenue
Portland, Oregon
DEQ ECSI No. 1430

For
Oregon Department of Environmental Quality
April 26, 2021

Project: BCSAmerica-1-01-03



April 26, 2021

Oregon Department of Environmental Quality
Northwest Region
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Source Control Evaluation – Groundwater
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GeoDesign, Inc., DBA NV5 is pleased to submit this Source Control Evaluation report for groundwater for the Former Automatic Vending Company site located at 5001 North Lagoon Avenue in Portland, Oregon. Our services were performed in accordance with the DEQ-approved work plans dated August 19, 2019 and May 19, 2020.

Please call if you have questions concerning this submittal.

Sincerely,

GeoDesign, Inc., DBA NV5



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Attachments

One copy submitted

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ACRONYMS AND ABBREVIATIONS

ASTM	American Society for Testing and Materials
BEHP	bis(2-ethylhexyl)phthalate
BGS	below ground surface
BS	blank spike
BSD	blank spike duplicate
COC	chemical of concern or contaminant of concern
COPC	chemical of potential concern or contaminant of potential concern
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CRBG	Columbia River Basalt Group
CSM	Conceptual Site Model
CUL	Cleanup Level
DCE	dichloroethene
DEQ	Oregon Department of Environmental Quality
ECSI	Environmental Cleanup Site Information
EPA	U.S. Environmental Protection Agency
EPH	extractable petroleum hydrocarbon
ESA	environmental site assessment
HDPE	high-density polyethylene
ICP-MS	inductively coupled plasma mass spectrometry
I.D.	identification
IDW	investigation-derived waste
JSCS	Joint Source Control Strategy
LOF	Locality of Facility
LUST	Leaking Underground Storage Tank
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
MTBE	methyl tertiary butyl ether
NC	not calculated
ND	not detected
NE	not established
NFA	No Further Action
not detected	compound not detected at a concentration equal to or greater than the laboratory method reporting limit or reporting detection limit
NTU	nephelometric turbidity unit
OAR	Oregon Administrative Rule
OWRD	Oregon Water Resources Department
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PCP	pentachlorophenol
PID	photoionization detector
ppm	parts per million

PVC	polyvinyl chloride
QA	quality assurance
QC	quality control
RBC	risk-based concentration
RBDM	<i>Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites</i>
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RPD	relative percent difference
SCE	Source Control Evaluation
SLV	screening level value
SVOC	semi-volatile organic compound
TCE	trichloroethene
TMB	trimethylbenzene
TPH	total petroleum hydrocarbon(s)
µg/L	micrograms per liter
USGS	U.S. Geological Survey
UST	underground storage tank
VOC	volatile organic compound
VPH	volatile petroleum hydrocarbon

1.0 INTRODUCTION

This SCE report for groundwater has been prepared on behalf of BSC America LLC by GeoDesign, Inc., DBA NV5 (GeoDesign) for the Former Automatic Vending Company site located at 5001 North Lagoon Avenue in Portland, Oregon (project site). The SCE components described herein were conducted in general accordance with the DEQ-approved work plans dated August 15, 2019¹ and May 15, 2020². The project site is shown relative to surrounding physical features on Figure 1. Acronyms and abbreviations used herein are defined above, immediately following the Table of Contents.

1.1 PURPOSE AND OBJECTIVES

The purpose of this SCE report is to provide a summary of the results of the identification, evaluation, and control of potential sources of contamination on the project site with the potential to impact the Willamette River. The SCE is intended to provide supporting documentation to assist DEQ in preparing a source control decision and NFA for the project site. Specific supporting information contained and referenced herein includes the following:

- A description of the project site background
- A description of and references to prior site assessments and investigations
- A description of the sources, nature, and extent of contamination
- A CSM, including a beneficial land and water use determination
- An evaluation of potential preferential pathways
- Residual risk screening and assessment
- Summary and recommendations

2.0 BACKGROUND

The following reports, prepared by others, were used to assist in developing an understanding of the environmental condition of the project site:

- *Subsurface Investigation*, prepared by PEMCO, dated July 15, 1992
- *Phase 1 Environmental Site Assessment*, prepared by K&S Environmental, Inc. (K&S), dated December 7, 2018 (K&S, 2018)
- *Hoist Removal and Remedial Excavation Report*, prepared by K&S, dated April 1, 2019

2.1 PROJECT SITE DESCRIPTION

The project site includes Tax Lot 700 of Multnomah County Tax Map 1N1E20A. The project site is located on Swan Island in the Willamette River. Swan Island was connected to the mainland sometime between 1927 and 1940 using dredge material reportedly originating from the Willamette River. The Portland Airport reportedly occupied Swan Island from 1927 to 1940 and it appeared that a runway may have historically occupied a portion of the project site. In 1944 the

¹ GeoDesign, Inc., 2019. *Work Plan; Limited Site Investigation; Former Automatic Vending Company; 5001 N Lagoon Avenue; Portland, Oregon; ECSI No. 1430*, dated August 19, 2019. GeoDesign Project: BCSAmerica-1-01-02

² GeoDesign, Inc., 2020. *Work Plan; Supplemental Limited Site Investigation; Former Automatic Vending Company; 5001 North Lagoon Avenue; Portland, Oregon; ECSI No. 1430*, dated May 19, 2020. GeoDesign Project: BCSAmerica-1-01-03

project site consisted of a parking lot with a building near the west side of the project site. The warehouse building was constructed on the project site in 1963 with additions constructed in 1969 and 1978. The warehouse building consists of an approximately 51,100-square-foot, metal-framed structure with a slab-on-grade foundation that is occupied by warehouse and office space.

The shop building located on the southwest portion of the project site was constructed in 1973/74 and consists of an approximately 1,200-square-foot, metal structure with a slab-on-grade foundation.

According to a Phase I ESA (K&S, 2018) the project site has been occupied by a distribution warehouse for candy and vending machine businesses (1963 through 2013), catering and equipment occupants and BCS America (2013 through 2019), Total Handling Solutions (2015 through 2019), Temp Control Mechanical (2016 through 2019), and Green State of Mind (2016 through 2019).

2.2 ADJACENT PROPERTIES

Properties adjoining the project site include Temp Control Mechanical to the west; Stagecraft Industries to the northwest; North Lagoon Avenue to the north, across which is a trucking storage area; North Ballast Street to the east, across which is Olsa Resources; TCM Corporation to the southeast; and vacant commercial/industrial space to the south.

2.3 ENVIRONMENTAL INVESTIGATIONS AND REGULATORY HISTORY

It appears the project site formerly contained six USTs that included one 10,000-gallon and three 20,000-gallon gasoline USTs formerly located northeast of the warehouse building and one 550-gallon motor oil UST and one 1,000-gallon waste oil UST formerly located northeast of the shop building. These six USTs were decommissioned in the early 1990s. Oil-impacted soil was observed during decommissioning of the motor oil and waste oil USTs formerly located on the project site. Approximately 134 tons of petroleum-impacted soil were excavated from the motor oil and waste oil UST pit and disposed of off site. The approximate limits of the excavation associated with decommissioning of the USTs is shown on Figures 2 and 3. The location of confirmation soil samples collected during decommissioning activities is shown on Figures 2 and 3.

Subsequently, PEMCO advanced four borings (B-1 through B-4) west of the remedial excavation to delineate the extent of impacted soil left in place. The locations of the PEMCO borings are shown on Figure 3. The property where borings B-1 through B-4 were located has since been sold to another entity; therefore, they are outside of the current project site boundary. Chemical analytical results of the soil samples collected from the borings indicated that oil was detected in fill material at concentrations of up to 2,000 mg/kg in a soil sample collected from boring B-3. PEMCO and DEQ concluded that the detection of oil appeared to be associated with fill material and was not related to the UST release. DEQ issued an NFA determination in May 1997 for LUST File No. 26-91-0415, which was associated with the USTs. However, DEQ listed the project site as ECSI No. 1430 due to detections of oil in the undocumented fill material. The soil analytical results from the PEMCO 1991 borings are summarized in Table 1.

K&S conducted a Phase I ESA at the project site in December 2018. The Phase I ESA identified in-ground hydraulic hoists and catch basins located in the shop as a REC at the project site. The Phase I ESA also identified the aforementioned open ECSI file as a REC at the project site.

K&S conducted a subsurface investigation at the shop building by advancing four borings (B-1 through B-4) to evaluate potential impacts to the subsurface from the hydraulic hoists and catch basins (locations shown on Figures 2 and 3). The maximum detected concentrations of diesel- and oil-range hydrocarbons, PCE, and PCBs were detected in boring B-3 (at approximately 7 feet BGS) at concentrations of 25,800 mg/kg, 17,000 mg/kg, 10.3 mg/kg, and 0.109 mg/kg, respectively.

The two in-ground hydraulic hoists formerly located inside the project site structure were removed in March 2019. A product sample collected of the hydraulic fluid indicated that PCBs were not detected at concentrations greater than the laboratory reporting limits. K&S observed the excavation of approximately 45.25 tons of impacted soil from the project site and disposed of it off site. Residual impacted soil was left in place because additional excavation would have compromised the building's foundation and structural integrity. Eight confirmation soil samples were collected from the limits of the excavation (shown on Figure 3). The maximum detected concentrations of diesel-range hydrocarbons, PCE, and PCBs were detected in confirmation soil sample C3 at concentrations of 3,600 mg/kg, 3.42 mg/kg, and 0.0339 mg/kg, respectively. Groundwater was not encountered to the total depth explored of 14 feet BGS during the 2019 assessment activities.

Historical soil chemical analytical data is summarized in Tables 1 through 6 and are discussed in Sections 8 and 9.

2.4 STORMWATER CONVEYANCE SYSTEM

The project site stormwater system layout is depicted on Figure 4. The majority of stormwater line infrastructure appears to have been constructed during site development in 1963 and subsequent building additions between 1969 and 1978. The understanding of the stormwater system layout is based on the following:

- As-built drawings
- City of Portland online records
- Utility survey conducted on July 8, 2020

Stormwater collection and conveyance at the project site are accomplished via seven catch basins (CB1 through CB7) and building roof drains. A blueprint of the project site from 1973 confirms that the two catch basins located on the project site discharge to the municipal sanitary sewer, as shown on Figure 4. The blueprint is presented in Appendix A.

GeoDesign attempted to trace the catch basin piping on July 8, 2020. However, catch basins CB1, CB4, and CB5 were clogged with debris and the discharge locations could not be confirmed. GeoDesign was able to confirm that catch basins CB2 and CB3 discharge to the municipal storm system. Based on this information, it is inferred that catch basins CB1, CB4, and CB5 likely also

discharge to the municipal stormwater system. The municipal stormwater system servicing the project site discharges to the Swan Island Basin via outfall S-2, located approximately 780 feet northwest of the project site.

2.5 GEOLOGICAL CONDITIONS

The project site is located along the north bank of the Willamette River floodplain, east of the Tualatin Mountains (or Portland Hills). The Portland Hills form the physiographic boundary between the Portland Basin to the east and the Tualatin Basin to the west.

Basement rock in the vicinity of the project site is similar to that exposed in the adjacent Portland Hills, which primarily consists of the Miocene CRBG (approximately 17 million to 6 million years old).³ The CRBG consists of layered flows of basalt that have been folded and faulted by the compressional tectonics of the region. The Pliocene-Pleistocene Troutdale Formation overlies the CRBG and generally consists of dense to very dense sand and gravel deposited by ancient rivers throughout the Portland Basin.

Overlying the Troutdale Formation are fine sand, silt, and clay deposited by the glacial-outburst Missoula Floods approximately 15,500 and 12,500 years ago. The flood waters left behind thick deposits of unconsolidated sediment where they flowed through the Portland Basin. Between flood events and following the last glaciation, the Willamette River reworked the topography left behind by the Missoula Floods and deposited more recent alluvium along its channel and floodplain. There are also accumulations of fill associated with historical development of Swan Island.

Shallow groundwater at the project site appears limited to a shallow unconfined fill/alluvial sand aquifer that is underlain by a clayey/sandy silt. The project site is approximately 415 feet south of the Swan Island Basin and approximately 860 feet north of the Willamette River. Groundwater monitoring wells have not been installed at the project site, so the predominant groundwater flow direction has not been determined. Based on the distribution of contaminants in groundwater, it appears that the project site is likely near a groundwater divide separating shallow flow into components discharging to the north to the Swan Island Basin and to the south to the Willamette River. Based on detected concentrations, we assume that the southwestern component, toward the Willamette River, is the predominant flow direction.

3.0 BENEFICIAL LAND AND WATER USE DETERMINATIONS

The purpose of the beneficial land and water use determinations is to provide information regarding the current and reasonably likely future beneficial uses of land and water in the vicinity of the project site. This land and beneficial water use information will be used to identify reasonable exposure pathways and potential receptors and in selecting appropriate remedial response actions for the project site. The land and beneficial water use determinations were

³ Beeson, M.H., Tolan, T.L., and Madin, I.P., 1991, Geologic Map of the Portland Quadrangle, Multnomah and Washington Counties, Oregon, and Clark County, Washington. Oregon Department of Geology and Mineral Industries Geological Map GMS-75, scale 1:24,000.

structured according to DEQ's *Consideration of Land Use in Environmental Remedial Actions*, dated July 1, 1998, and *Guidance for Conducting Beneficial Water Use Determinations at Environmental Cleanup Sites*, dated July 1, 1998.

3.1 LOF

The LOF, as defined in OAR 340-122-115(34), includes any point where human or ecological receptors may contact, or are reasonably likely to come into contact with, facility-related hazardous substances. The LOF takes into account factors such as existing site conditions, regional and local hydrogeology, and the likelihood of contaminants migrating over time. The results of subsurface investigations indicate that COPCs associated with the project site have migrated into groundwater and could migrate off the project site boundaries. Therefore, the LOF includes the project site and the adjoining property to the southwest (down gradient based on the inferred groundwater flow direction).

3.2 CURRENT AND REASONABLY LIKELY FUTURE LAND USES

The determination of current and reasonably likely future land use was performed in general accordance with DEQ's *Consideration of Land Use in Environmental Remedial Actions*, dated July 1, 1998. This determination was based on a review of a City of Portland zoning map.

3.2.1 Historical Land Use

The Portland Airport reportedly occupied Swan Island from 1927 through 1940 and it appeared that a runway may have historically occupied a portion of the project site. In 1944 the project site consisted of a parking lot with a building near the west side of the project site.

The warehouse building was constructed on the project site in 1963 with additions constructed in 1969 and 1978. The shop building was constructed in 1973 and appeared to be used for equipment and truck maintenance until sometime before 2014.

3.2.2 Current Land Use

The project site buildings are currently vacant. According to the City of Portland Planning and Sustainability Department, the project site is zoned General Industrial 2 (IG2). According to information obtained from the City of Portland, this zoning designation indicates only commercial development is allowed and generally includes manufacturing, warehouse and freight movement, wholesale sales, industrial services, railroad yards, parks, and opens spaces. Residential use is allowed after a conditional use review.

3.2.3 Future Land Use

The City of Portland Comprehensive Plan was recently approved (2016); therefore, changes in the zoning are unlikely. Based on this, it appears the reasonably likely future land use in the LOF will remain consistent with current land use.

3.2.4 Beneficial Land Use Determination Summary

The current and likely future land use within the LOF appears to be industrial or commercial developments. Land use within the LOF currently consists of industrial use. Reasonably likely future land use in this area is expected to be consistent with the current zoning designation.

3.3 CURRENT AND REASONABLY LIKELY FUTURE WATER USES

Information presented herein regarding the current and reasonably likely beneficial uses of water at the project site and in the vicinity of the project site is based on a review of water supply well records, water rights documents, and project site observations.

The following regulatory sources were reviewed to obtain information regarding beneficial water uses:

- OWRD online well query database for water wells located in Section 20, Township 1 North, Range 1 East of the Willamette Meridian
- OWRD online interactive mapping application for water rights information
- National Wetlands Inventory Map for Portland, Oregon

3.3.1 Water Supply Well Evaluation

A search for and evaluation of relevant water supply wells (i.e., wells specifically for water supply) was completed within a 0.25-mile radius of the project site. It is our professional opinion that a 0.25-mile radius is an adequate search criterion because the Willamette River is within 0.25 mile down gradient of the project site and because the project site area is predominately industrial. Information on OWRD's online well query database was used to identify locations and evaluate the construction and engineering specifications of the wells. Geotechnical borings, grounding wells, monitoring wells, dewatering wells, or abandoned wells were not included in the search criteria. Based on OWRD records, there are no wells within a 0.25-mile radius of the project site.

3.3.2 Water Rights

Water right records for the project site and surrounding properties within 0.25-mile radius of the project site were reviewed using the OWRD water rights interactive mapping tool. The OWRD interactive mapper identifies water rights for which preliminary permits or certificates have been issued. Permits or certificates were not identified for properties within 0.25 mile of the project site.

3.3.3 Wetlands

According to the National Wetlands Inventory, wetlands are not located on the project site or the immediately surrounding properties.

3.3.4 Surface Water Bodies

The nearest bodies of water to the project site are the Swan Island Basin located approximately 415 feet northwest of the project site and the Willamette River located approximately 860 feet south of the project site.

3.3.5 Beneficial Water Use Determination Summary

A search of the OWRD database did not indicate the presence of water supply wells in the vicinity of the project site. Potable water in the project site vicinity is provided by the City of Portland, which primarily comes from the Bull Run Watershed and secondarily from the Columbia South Shore Well Field. Based on this, it appears that groundwater in the project site vicinity is not currently nor is reasonably likely to be developed for municipal or community consumptive use.

The project site is located approximately 860 feet north of the Willamette River. Based on this proximity to the project site, groundwater beneath the project site likely discharges to the Willamette River, which is a beneficial use.

4.0 CONCEPTUAL SITE MODEL

A CSM defines the potentially complete exposure pathways by which receptors may be exposed to site contaminants under current or anticipated future conditions. A complete pathway from the contaminant source to a human or ecological receptor is necessary in order for contaminant exposure to occur. A discussion of potential contaminant sources, the nature and extent of contamination, and a list of COPCs at the project site are presented in the following sections. A graphical representation of the CSM is presented on Figure 5. A determination of current and reasonably likely future land and beneficial water use at the project site and surrounding properties is discussed in Section 3.0, and a receptor-exposure pathway analysis is presented in the following sections.

The current and previous environmental investigations have indicated the following environmental concerns at the project site:

- Fill material beneath the project site contains elevated concentrations of petroleum hydrocarbons, SVOCs, and metals.
- Soil beneath the former hydraulic hoists is impacted with petroleum hydrocarbons, PCE, and PCBs.

Based on current and previous investigations, the primary COPCs at the project site are petroleum hydrocarbons, PCE, TCE, SVOCs, PCBs, and metals (specifically arsenic, cadmium, chromium, copper, lead, mercury, and zinc). The potential source of contamination, nature and extent of contamination, and potential exposure routes associated with the project site are discussed below.

4.1 POTENTIAL EXPOSURE-RECEPTOR PATHWAYS

The following elements comprise a potentially complete exposure pathway: (1) a chemical source, (2) a mechanism of chemical release to the environment, (3) an environmental transport media, (4) an exposure point where contact between the contaminated medium and the receptor occurs, and (5) an exposure route at the exposure point. Potential receptor-exposure pathways are discussed below and only the RBCs associated with these potential receptor-exposure pathways are considered applicable at the project site.

4.1.1 Potential Human Receptors and Exposure Pathways

Potential human receptors are those individuals that may be exposed to COPCs under the current and reasonably likely future land use scenarios. Land use considerations are key in determining the types of human receptors likely to be exposed to site-derived contaminants.

As described previously in this report, the project site is zoned for industrial use. Based on this, the following current and potential future receptors were identified for quantitative evaluation in the risk-based screening:

- Adults in an occupational scenario
- Adults in a construction/excavation worker scenario

4.1.1.1 Soil

Potentially complete exposure pathways for soil within the LOF include the following:

- Incidental ingestion, inhalation of particulates, and/or dermal contact for construction worker and excavation worker receptors
- Volatilization to outdoor air for occupational receptors
- Vapor intrusion into buildings for occupational receptors

The project site is currently capped with hardscapes. It is anticipated that future use of the project site would also result in the project site being capped with hardscapes. Therefore, the ingestion, inhalation, and dermal contact exposure pathway for occupational receptors is considered incomplete at the project site.

In addition, groundwater within at least a 0.25-mile radius of the project site is not currently nor is reasonably likely to be developed for municipal or community consumptive use. Therefore, the leaching to groundwater exposure pathway is considered incomplete at the project site.

4.1.1.2 Groundwater

Potentially complete exposure pathways for groundwater within the LOF include the following:

- Volatilization to outdoor air and subsequent inhalation by occupational receptors
- Vapor intrusion into buildings and subsequent inhalation by occupational receptors
- Direct contact in excavations by construction and excavation workers

Groundwater within a 0.25-mile radius of the project site is not currently nor is reasonably likely to be developed for municipal or community consumptive use. Therefore, the ingestion and inhalation from tap water exposure pathway is considered incomplete at the project site.

4.1.2 Potential Ecological Receptors and Exposure Pathways

The project site is located approximately 860 feet north of the Willamette River and is within River Miles 9 and 10 of the Portland Harbor study area. The inferred groundwater flow direction is south toward the Willamette River. Based on this, the groundwater to surface water (Willamette River) exposure pathway is considered complete at the project site.

Stormwater generated at the project site is discharged to the City of Portland sanitary sewer system and the City of Portland stormwater sewer system. The stormwater sewer system discharges to the Swan Island Basin via outfall S-2. Therefore, the surface water run off to the Willamette River is considered a potential exposure pathway.

5.0 REGULATORY SCREENING LEVELS

Based on the CSM discussed in Section 4.0, the following exposure pathways and associated RBCs or regulatory screening levels are applicable to the project site and are used for comparison:

- DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for construction worker and excavation worker receptors
- DEQ *Volatilization to Outdoor Air* RBC for an occupational receptor
- DEQ *Vapor Intrusion into Buildings* RBC for an occupational receptor
- DEQ *Groundwater in Excavations* RBC for a construction/excavation worker receptor
- EPA Portland Harbor⁴ Riverbank CULs
- DEQ JSCS⁵ initial upland source control SLVs

DEQ also requested that site-specific oil-range hydrocarbon RBCs be calculated for the project site using EPH/VPD data. The site-specific RBCs were calculated using the DEQ Excel Spreadsheet and DEQ's guidance document titled *Risk-Based Decision Making for the Remediation of Contaminated Sites*, updated October 2, 2017. Constituent data from soil sample DP-15(1-2) was used in the calculation because it had the highest detected concentration of oil-range hydrocarbons. The data entered into the DEQ Excel Spreadsheet is presented in Appendix B.

The chemical analytical results from the environmental investigations and remedial actions are summarized and compared to the applicable regulatory screening levels in Tables 1 through 11 and discussed in Sections 8.0 and 9.0. Benzo(a)pyrene equivalents (cPAHs) were calculated using the toxic equivalency factors presented in DEQ's *Human Health Risk Assessment Guidance*, dated October 2010. One-half the detection limits were used for cPAHs that were not detected.

6.0 FIELD ACTIVITIES

Thirteen direct-push borings (DP-1 through DP-13) were advanced on July 18 and 19, 2019 to depths of up to 35 feet BGS on the project site in accordance with a DEQ-approved work plan¹ to evaluate soil impacts associated with the fill material and former in-ground hydraulic hoists.

Six direct-push borings (DP-14 through DP-19) were advanced on July 16, 2020 to a depth of 35 feet BGS at the project site in accordance with the DEQ-approved work plan² to further evaluate the extent of fill material on the project site and evaluate groundwater conditions beneath the project site.

At least one soil sample was collected from each of the borings at depths of potential interest based on previous environmental explorations or field evidence of impact. Only one soil sample was deemed necessary because the fill material appeared to be a single source and relatively homogeneous. Groundwater samples were collected from temporary wells installed in borings DP-1 through DP-3 and DP-14 through DP-19. Prior to collecting groundwater samples, each

⁴ Table 17 of EPA's *Record of Decision for the Portland Harbor Superfund Site*, dated January 2017

⁵ Table 3.1 of DEQ's *Portland Harbor Joint Source Control Strategy*, dated December 2005

temporary well was purged of at least 3 casing volumes. Field measurements for turbidity and pH were recorded immediately prior to collecting the groundwater samples, which are summarized in the table below. Groundwater samples were placed in laboratory-provided sample containers stored in a cooler on ice and transferred to Apex Laboratories of Tigard, Oregon. A summary of field activities and the exploration logs are presented in Appendix C.

Groundwater Sample	Screen Interval (feet BGS)	Turbidity (NTUs)	pH
DP-1W	20 - 30	5.97	6.73
DP-2W	20 - 30	2.86	6.07
DP-3W	25 - 35	1.42	5.97
DP-14W	24 - 34	42.5	6.26
DP-15W	20 - 35	67.7	6.67
DP-16W	20 - 30	202	6.84
DP-17W	20 - 30	18.7	6.73
DP-18W	20 - 35	22.9	6.41
DP-19W	20 - 35	30.2	6.58

6.1 SUBSURFACE CONDITIONS

Based on the history of Swan Island, it is likely that significant amounts of fill, consisting of dredged material from the Willamette River, was historically placed beneath the project site. During drilling activities, it was difficult to determine the contact between the upper hydraulically placed fill and lower native alluvial soil because the dredged material is similar to the presumptive native material. Therefore, only soil that was clearly and distinguishably fill material was identified as fill. However, it is likely that material identified as “native” soil could be historically placed fill.

Fill was encountered in borings DP-11 through DP-15, DP-17 through DP-19. The fill material consists of sand with trace amounts of silt and was observed overlying a concrete slab at approximately 7.5 feet BGS in borings DP-11 through DP-13. This fill material appears to be the same fill material that was encountered off site during previous investigations (PEMCO 1992). The fill material appeared to thin to the north and east, away from the shop building. Pea gravel was encountered in boring DP-3 (former shop UST area). Fill material was not encountered in the boring advanced beneath the project site structure. It is likely that shallow fill material identified in other borings conducted at the project site was removed during construction of the project site structure.

Native soil below the fill consists of sand with trace amounts of silt and gravel. A gray silt layer with some clay and trace sand was encountered in borings DP-1, DP-2, DP-3, and DP-14 through DP-17 at depths between 22 and 23 feet BGS. Sand and gravel were encountered below the silt to the total depths explored. The exploration logs depicting the lithology are presented in Appendix C.

Groundwater was encountered beneath the project site at depths between approximately 21 and 31 feet BGS. Zones of perched groundwater could also be present at shallower depths,

particularly where more permeable soil is underlain by less permeable soil. Groundwater levels are also anticipated to fluctuate with water levels in the nearby Willamette River.

6.2 FIELD SCREENING RESULTS

A GeoDesign representative observed the drilling activities and collected soil samples from the borings for field screening purposes and potential chemical analysis. Field screening included visual and olfactory observations, water sheen screening, and headspace vapor screening using a hand-held PID. An elevated PID reading of 56.2 ppm was observed in boring DP-5 at approximately 11 feet BGS. Suspect fill material was observed in borings DP-11 through DP-15 and DP-17 through DP-19 from the ground surface to depths of up to 8.5 feet BGS. Field screening results are shown on the exploration logs presented in Appendix C.

7.0 ANALYTICAL PROGRAM

The analytical programs were conducted in general accordance with DEQ-approved work plans^{1,2}, with the exceptions discussed in the following sections. The analytical programs did not include analysis for pesticides, herbicides, cyanide, manganese, vanadium, dioxins, furans, and tributyltin because there is no known historical agricultural use and the project site has not been occupied by businesses that use, store, or manufacture equipment or chemicals that would contain these compounds.

7.1 SOIL

The 2019 subsurface investigation analytical program was broken up into two programs: (1) analysis of soil samples collected from the former in-ground hydraulic hoist area and (2) analysis of soil samples collected of suspect fill material. At least one soil sample collected from borings advanced at the former in-ground hydraulic hoist area (borings DP-4 through DP-10) was analyzed for the following:

- Gasoline-range hydrocarbons by Method NWTPH-Gx
- Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
- VOCs by EPA Methods 5035A and 8260C SIM
- PCBs by EPA Method 8082

Based on field screening and preliminary chemical analytical results, soil samples collected from borings DP-4 through DP-10 were also analyzed for one or more of:

- VPH by Method WA VPH
- EPH by Method WA EPH
- PAHs by Method EPA 8270D-SIM
- RCRA 8 total metals by EPA Method 6020A

At least one soil sample collected from borings that encountered suspected fill material (borings DP-10 through DP-13) was submitted for analysis of the following:

- Gasoline-range hydrocarbons by Method NWTPH-Gx
- Diesel- and oil-range hydrocarbons by Method NWTPH-Dx

- EPH by Method NW EPH
- VPH by Method NW VPH
- VOCs by EPA Methods 5035A and 8260C
- SVOCs by EPA Method 8270D-SIM
- PCBs by EPA Method 8082
- Priority 13 pollutant total metals by EPA Method 6020A

The 2020 subsurface investigation analytical program was refined based on the findings of the 2019 investigation. At least one soil sample collected from borings DP-14 through DP-19 were submitted for the following:

- Gasoline-range hydrocarbons by Method NWTPH-Gx
- Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
- EPH by Method NW EPH (two soil samples with the greatest detected concentrations of petroleum hydrocarbons)
- VPH by Method NW VPH (two soil samples with the greatest detected concentrations of petroleum hydrocarbons)
- VOCs by EPA Methods 5035A and 8260B
- PAHs by Method 8270D-SIM
- PCBs by EPA Method 8082
- RCRA 8 total metals by EPA Method 6020A
- Total copper and zinc by EPA Method 6020A

The laboratory reports and chain-of-custody documentation are presented in Appendix D.

7.2 GROUNDWATER

Groundwater samples collected during the 2019 subsurface investigation were analyzed for the following:

- Gasoline-range hydrocarbons by Method NWTPH-Gx
- Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
- VOCs by EPA Methods 5035A and 8260C SIM
- SVOCs by EPA Method 8270D-SIM
- PCBs by EPA Method 8082
- Total priority 13 pollutant metals by EPA Method 6020A (ICP-MS)

The DEQ-approved work plan also included analysis for EPH/VPH and dissolved priority 13 pollutant metals on select samples. Dissolved metals analysis was only performed on samples with total metals concentrations that exceeded applicable regulatory screening levels. EPH/VPH analysis was not performed on groundwater samples DP-1W through DP-3W because petroleum hydrocarbons were either not detected or detected at a concentration less than generic DEQ RBCs.

Groundwater samples collected from the 2020 subsurface investigation were analyzed for the following:

- Gasoline-range hydrocarbons by Method NWTPH-Gx
- Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
- VOCs by EPA Method 8260B
- SVOCs by EPA Method 8270D-SIM
- PCBs by EPA Method 8082 (select samples)
- Total and dissolved arsenic, copper, and lead by EPA Method 6020A (ICP-MS)

Based on preliminary soil and groundwater results, select groundwater samples were also analyzed for total and/or dissolved cadmium and mercury and PCBs.

The laboratory reports and chain-of-custody documentation are presented in Appendix D.

8.0 DEQ RBC EVALUATION

Soil and groundwater samples collected from the project site between 1991 and 2020 are compared to the applicable DEQ RBCs (see Section 5.0) in the following section. A summary of the analytical data is presented in Tables 1 through 11. The laboratory reports and chain-of-custody documentation are presented in Appendix D.

8.1 SOIL

A discussion of the soil analytical results by area and material type is presented below.

8.1.1 Hydraulic Hoists Area

Diesel- and oil-range hydrocarbons were detected in soil samples collected from the 2019 K&S boring B-3 at 7 feet BGS at concentrations greater than DEQ RBCs. However, soil representative of this sample was subsequently removed during the hydraulic hoist remedial excavation. Confirmation soil samples collected from the limits of the excavation indicated that COPCs were not detected at concentrations greater than DEQ RBCs.

COPCs were otherwise not detected in the confirmation soil samples and soil samples collected from borings advanced in the vicinity of the hydraulic hoist remedial excavation at concentrations greater than applicable DEQ RBCs.

8.1.2 Former UST Areas

COPCs were not detected in confirmation soil samples collected from the limits of the former UST nests and/or borings advanced near the former UST nests located on the east portion of the project site and near the shop at concentrations greater than applicable DEQ RBCs.

8.1.3 Fill Material

Soil chemical analytical results indicated that the fill material in the vicinity of the shop is impacted with PCBs and select metals at concentrations greater than applicable DEQ RBCs. The contaminants detected in the fill materials at concentrations greater than RBCs are as follows:

- Total PCBs were detected in soil samples DP-12(5-6.5), DP-13(5-6.5), and DP-15(1-2) at concentrations of 14.36 mg/kg, 8.38 mg/kg, and 13.5 mg/kg, respectively. These detected concentrations are greater than the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for a construction worker receptor but less than the RBC for an excavation worker receptor.
- Arsenic was detected in soil samples DP-11(6-7.5), DP-12(5-6.5), DP-13(5-6.5), DP-14(0.5-1.5), and DP-15(1-2) at concentrations between 21.0 and 172 mg/kg. These detected concentrations are greater than the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for a construction worker receptor but less than the RBC for an excavation worker receptor.
- Lead was detected in soil sample DP-12(5-6.5) at concentrations greater than the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction worker and excavation worker receptors.

COPCs were not detected in fill material identified in borings DP-17 through DP-19 at concentrations greater than applicable DEQ RBCs.

8.1.4 Native Soil

COPCs were not detected in the soil samples collected of native soil, including native soil immediately below impacted fill, at concentrations greater than applicable DEQ RBCs. These results indicate the elevated concentrations of COPCs are associated with the historical area-wide placement of the fill material and not due to on-site activities.

8.2 GROUNDWATER

Petroleum hydrocarbons, VOCs, SVOCs, PCBs, and total and dissolved metals were either not detected or were detected at concentrations less than applicable DEQ RBCs.

9.0 PORTLAND HARBOR EVALUATION

Soil and groundwater analytical results from samples collected from the project site between 1991 and 2020 are compared to the EPA Portland Harbor³ groundwater CULs and the DEQ JSCS⁴ Initial Upland Source Control SLVs (Table 3.1) in the following sections.

9.1 SOIL

COPCs were generally detected at concentrations greater than Portland Harbor CULs and/or DEQ JSCS SLVs in the soil samples collected of the fill material. However, COPCs were not detected at concentrations greater than regulatory screening levels in soil samples collected of the native material (see Section 6.1) below the fill material and in contact with groundwater. The detected exceedances are discussed further in the following sections and are shown on Figures 6 and 7. The chemical analytical results are also summarized in Tables 1 through 6. The laboratory reports and chain-of-custody documentation are presented in Appendix D.

9.1.1 Hydraulic Hoist Area

Diesel-range hydrocarbons and PCE were detected in a soil sample collected from K&S boring B-3 at a concentration greater than the Portland Harbor CUL. However, soil represented by this sample was removed during the remedial hydraulic hoist excavation. Diesel-range hydrocarbons were detected in the hydraulic hoist remedial excavation confirmation soil sample C7 at a concentration greater than the Portland Harbor CUL of 91 mg/kg.

Diesel-range hydrocarbons were not detected in the subsequent borings advanced in or near the hydraulic hoist remedial excavation at concentrations greater than the Portland Harbor CUL. Based on these results, the extent of residual impacts of diesel-range hydrocarbons exceeding Portland Harbor CULs is limited to beneath the shop area.

PCE, benzo(g,h,i)perylene, and total PCBs were detected in selected confirmation soil samples collected from the hydraulic hoist remedial excavation at concentrations greater than the DEQ JSCS SLVs or Portland Harbor CULs. However, PCE, benzo(g,h,i)perylene, and total PCBs were not detected in the subsequent borings advanced in or near the hydraulic hoist remedial excavation at concentrations greater than applicable regulatory screening levels. In addition, individual PCB aroclors were not detected in the confirmation soil samples at concentrations greater than DEQ JSCS SLVs. Based on these results, it appears that the extent of residual soil impacts of PCE exceeding Portland Harbor CULs is limited to the shop area.

COPCs were otherwise not detected in the hydraulic hoist area or were detected at concentrations less than Portland Harbor CULs and DEQ JSCS SLVs.

9.1.2 Former UST Areas

PAHs, total PCBs, and select metals were detected in the vicinity of the shop USTs at concentration greater than Portland Harbor CULs and DEQ JSCS SLVs. However, these exceedances are attributed to fill material, which is discussed in the following section.

COPCs were otherwise either not detected or were detected at concentrations less than applicable DEQ RBCs in soil samples collected from the former UST areas.

9.1.3 Fill Material

Fill material (excluding pea gravel) was encountered in borings DP-11 through DP-15 and DP-17 through DP-19. Impacted fill material appeared to be associated with a brown/gray/orange sand material that was encountered in borings DP-11 through DP-15 and DP-17. Fill material encountered in DP-18 and DP-19 appeared to be a brown sand material that was not significantly impacted. The following compounds were detected in the fill material:

- Up to 11 SVOCs were detected in soil samples DP-11(6-7.5), DP-12(5-6.5), DP-13(5-6.5), and DP-15(1-2) at concentrations greater than the corresponding Portland Harbor CULs and/or DEQ JSCS SLVs. The calculated cPAH value and total PAHs for soil samples DP-11(6-7.5), DP-12(5-6.5), DP-13(5-6.5), and DP-15(1-2) also exceed the Portland Harbor CULs. However, detected SVOCs and calculated cPAH/total PAH values in the soil samples collected below these samples do not exceed the Portland Harbor CULs and/or DEQ JSCS SLVs.
- BEHP was detected in soil sample DP-2(21-22.5) at a concentration greater than the Portland Harbor CUL, but is less than the DEQ JSCS SLV. BEHP was not detected in the soil sample collected below [DP-2(25-26.5)] at a concentration greater than the laboratory detection limit.

- PCB aroclors 1242, 1254, and 1260 and total PCBs were detected in soil samples DP-11(6-7.5), DP-12(5-6.5), DP-13(5-6.5), and DP-15(1-2) at concentrations greater than the Portland Harbor CULs and/or DEQ JSCS SLVs. However, PCBs were not detected in the soil samples collected below these samples at concentrations greater than the laboratory detection limits.
- Total PCBs were detected in soil sample DP-17(0.5-1.5) at a concentration greater than the Portland Harbor CUL. However, the individual PCBs were not detected at concentrations greater than the DEQ JSCS SLVs. Also, PCBs were not detected in soil sample DP-17(2-3), which was collected below soil sample DP-17(0.5-1.5).
- Antimony, arsenic, cadmium, chromium, copper, lead, mercury, and/or zinc were detected in soil samples collected of fill material [DP-11(6-7.5), DP-12(5-6.5), DP-13(5-6.5), DP-14(0.5-1.5), and DP-15(1-2)] at concentrations greater than the Portland Harbor CULs and/or DEQ JSCS SLVs. However, these metals were not detected in the native soil samples collected below the fill material at concentrations greater than the Portland Harbor CULs and/or DEQ JSCS SLVs.
- Mercury was detected in soil sample DP-17(0.5-1.5) at a concentration greater than the Portland Harbor CUL and DEQ JSCS SLV. Arsenic was detected in soil sample DP-18(2-3) at a concentration greater than the Portland Harbor CUL, but less than the DEQ JSCS SLV. However, the detected concentrations of mercury and arsenic in these samples are less than the DEQ-established background concentrations for the Portland Basin. Based on these results, it does not appear that the detected concentrations of metals represent a risk to receptors in the Portland Harbor.

COPCs were otherwise either not detected in fill material or were detected at concentrations less than Portland Harbor CULs and DEQ JSCS SLVs.

9.1.4 Native Soil

COPCs were not detected in the soil samples collected of native soil, including native soil immediately below impacted fill, at concentrations greater than DEQ Portland Harbor CULs and DEQ JSCS SLVs. These results indicate the elevated concentrations of COPCs are associated with the historical area-wide placement of the fill material and not due to on-site activities.

9.2 GROUNDWATER

Detected concentrations of COPCs that exceed the Portland Harbor CULs or DEQ JSCS SLVs are discussed in the following sections and are shown on Figure 8. The chemical analytical results are also summarized in Tables 7 through 11. The laboratory reports and chain-of-custody documentation are presented in Appendix D.

9.2.1 Petroleum Hydrocarbons

Gasoline-range hydrocarbons were detected in groundwater sample DP-3W at a concentration of 58.8 µg/L. A Portland Harbor CUL and DEQ JSCS SLV have not been established for generic gasoline-range hydrocarbons.

Petroleum hydrocarbons were otherwise not detected at concentrations greater than the laboratory detection limits.

9.2.2 VOCs

PCE was detected in groundwater samples DP-1W, DP-2W, DP-3W, DP-14W at concentrations greater than the Portland Harbor CUL and the DEQ JSCS SLV. TCE was detected in groundwater samples DP-2W, DP-3W, and DP-14W at concentrations greater than the Portland Harbor CUL and the DEQ JSCS SLV. TCE was not detected in groundwater sample DP-1W at a concentration greater than the laboratory detection limit.

Based on these results, it appears that low concentrations of PCE and TCE are present in groundwater beneath the shop area. The detected concentrations of PCE decrease in the inferred down-gradient direction from 10.5 µg/L (DP-2W) to 0.601 µg/L (DP-1W) and the detected concentrations of TCE decreased from 1.86 µg/L (DP-2W) to not detected at 0.0100 µg/L (DP-1W). These results imply a reduction rate of approximately 0.87 µg/L per 10 linear feet for PCE. Based on this, it appears that PCE and TCE concentrations would be significantly less than Portland Harbor CULs and DEQ JSCS SLVs once the groundwater reaches the Willamette River. Therefore, the PCE and TCE concentrations detected at the project site do not represent a significant risk to the Portland Harbor.

VOCs were otherwise either not detected or were detected at concentrations less than Portland Harbor CULs and/or DEQ JSCS SLVs.

9.2.3 SVOCs

Benzyl alcohol was detected in groundwater sample DP-2W at a concentration slightly greater than the DEQ JSCS SLV. A Portland Harbor CUL has not been established for benzyl alcohol. Benzyl alcohol was also detected in the groundwater sample collected down gradient of boring DP-2 (sample DP-1W) at a concentration of 0.524 µg/L, which is less than the DEQ JSCS SLV. Based on these results, it does not appear that the detected concentration of benzyl alcohol represents a risk to receptors in the Willamette River.

SVOCs were otherwise not detected at concentrations greater than the laboratory reporting limits.

9.2.4 PCBs

PCBs were not detected in the six groundwater samples submitted for analysis.

9.2.5 Total and Dissolved Metals

Total and dissolved arsenic were detected in groundwater samples DP-1W, DP-2W, DP-3W, DP-14W, DP-15W, DP-17W, and DP-19W at concentrations greater than the Portland Harbor CUL and the DEQ JSCS SLV. Arsenic is a naturally occurring element and according to a study done by USGS⁶, arsenic was detected at concentrations ranging from less than 1 µg/L to 2,000 µg/L in the 728 groundwater samples collected from the Willamette Basin. The study states that intermediate arsenic concentrations (greater than 10 µg/L and less than or equal to 50 µg/L) were widespread in the Willamette Basin. Based on the widespread detections of arsenic in

⁶ *Arsenic in Ground Water of the Willamette Basin, Oregon*, prepared by Stephen R. Hinkle and Danial J. Polette (USGS in coordination with OWRD), dated 1999.

groundwater at the project site and the previously referenced study, it is likely that the detected concentrations of arsenic are representative of background concentrations in the area and do not represent an unacceptable risk to receptors in the Willamette River.

Total copper and lead were detected in groundwater sample DP-1W and DP-14W at concentrations greater than the Portland Harbor CULs and the DEQ JSCS SLVs. However, dissolved copper and lead were not detected in groundwater samples DP-1W and DP-14W at concentrations greater than the Portland Harbor CULs and the DEQ JSCS SLVs. It appears that the total detected concentrations of copper and lead are likely associated with suspended solids and do not represent an unacceptable risk to the Willamette River.

Total and dissolved metals were otherwise either not detected or were detected at concentrations less Portland Harbor CULs and/or DEQ JSCS SLVs.

10.0 QA AND QC

The following sections describe the QA/QC protocols used during the investigation.

10.1 SOIL QA/QC

The soil chemical analytical data was reviewed for QA/QC issues. Our review indicated that select analytes had detection limits that exceeded regulatory screening levels and/or the laboratory had assigned qualifiers to the reported values.

COCs with detection limits greater than applicable regulatory screening levels are listed in the table below. The samples with detection limits that exceed screening levels are shown in italics in Tables 1 through 6.

Soil Laboratory Detection Limit Exceedances

Analyte	Detection Limit (mg/kg)	Screening Levels (mg/kg)
Diesel-range hydrocarbons	213 – 315	91 (Portland Harbor CUL)
C10-C12 Aliphatic (EPH)	9.42 – 13.0	2.6 (Portland Harbor CUL)
Acenaphthylene	0.348	0.2 (DEQ JSCS SLV)
BEHP	0.868 – 5.23	0.135 (Portland Harbor CUL) 0.330 (DEQ JSCS SLV)
Naphthalene	0.698	0.561 (DEQ JSCS SLV)
PCP	3.48	0.250 (DEQ JSCS SLV)
2-Methylnaphthalene	0.348 and 0.698	0.2 (DEQ JSCS SLV)

The detection limits for the above-listed analytes were generally for select samples and were elevated because the laboratory had to dilute the sample during analysis. In addition, select analytes were qualified by the laboratory as estimated values (J-flagged). However, the analytes qualified as estimated values generally either exceeded regulatory SLVs by an order of magnitude

or were an order of magnitude less than regulatory SLVs. Therefore, it is our professional opinion that these qualifications do not hinder our ability to accurately characterize the project site.

Total mercury was analyzed 20 days past the hold time for samples DP-11(10-11.5), DP-12(10-11.5), and DP-13(10-11.5). Analyzing mercury past the holding time results in a biased low reported value. However, the soil samples have been kept sealed and on ice since collection. Therefore, it is unlikely that the holding time exceedance greatly impacted the results.

10.2 GROUNDWATER QA/QC

GeoDesign analyzed trip blanks associated with two coolers used to transport the groundwater samples collected at the project site. The trip blanks were analyzed for VOCs by EPA Method 8260C. VOCs were not detected in the trip blanks at concentrations greater than the laboratory detection limits. The chemical analytical results for the trip blanks are provided in the laboratory report presented in Appendix D.

GeoDesign collected a duplicate groundwater sample (DP-16W-DUP) from direct push boring DP-16. The analytical results indicated that laboratory precision is within acceptable range. The chemical analytical results for the original and duplicate groundwater samples collected from boring DP-16 are summarized on Tables 7 through 11.

Our review of the chemical analytical reports indicated that the detection limits of up to 11 SVOCs (benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenz(a,h)anthracene, PCP, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, and naphthalene) and PCBs are greater than applicable regulatory screening levels. The samples with detection limits that exceed screening levels are italicized in the tables.

Please note that the groundwater samples collected were analyzed for the lowest detection limits achievable by the analytical laboratory based on available technology. Based on this, it is our professional opinion that the exceedances do not hinder our ability to accurately characterize groundwater at the project site.

11.0 CONCLUSIONS AND RECOMMENDATIONS

GeoDesign conducted the limited site investigations for the SCE at the Former Automatic Vending Company site in accordance with the DEQ-approved work plans^{1,2}. The purpose of the limited site investigations was to obtain data for the identification, evaluation, and control of potential sources of contamination on the project site to assess potential impacts to the Willamette River.

11.1 FORMER IN-GROUND HYDRAULIC HOIST AREA

Based on the soil chemical analytical results, it does not appear that a significant amount of impacted soil was left in place during decommissioning of the in-ground hydraulic hoists. Borings DP-1, DP-6, DP-8, DP-9, and DP-10 were advanced around the perimeter of the in-ground hydraulic hoist excavation to evaluate the lateral extent of residual contamination. Petroleum

hydrocarbons, VOCs, PAHs, and PCBs were not detected in soil samples collected from these borings at concentrations greater than the applicable DEQ RBCs. Boring DP-2 was located in the area where the greatest concentrations of COPCs were detected during hoist decommissioning and was advanced significantly deeper than the previous excavation limits to evaluate the vertical extent of impacts. Elevated concentrations of the COPCs were not detected in the soil samples collected at depths greater than the previous excavation. Therefore, it appears that both the lateral and vertical extent of impacts were adequately evaluated and the remedial excavation conducted by K&S in March 2019 adequately remediated the impacts to soil from the release and no further investigation or cleanup is warranted.

11.2 FORMER UST AREAS

Confirmation soil samples and subsequent borings indicate that the former USTs located on the east portion of the project site did not leak and the remedial excavation conducted during decommissioning of the former USTs near the shop successfully removed impacted soil.

11.3 FILL EVALUATION

Fill material was originally encountered in PEMCO borings B-1 through B-4, which were advanced off site to the west of the project site. Fill material (excluding pea gravel backfill) was encountered in GeoDesign borings DP-11 through DP-15, DP-17, and DP-18. Fill material was encountered in the shop area above a concrete slab that was buried between 7.5 and 8.5 feet BGS. It appeared that the fill material thinned laterally to the north and east away from the project site. The estimated extent of impacted fill material on the project site is shown on Figure 2.

The fill material appears to be an area-wide unit associated with the former airport that occupied Swan Island from approximately 1927 through 1940. Chemical analytical results indicate that the fill material is impacted with petroleum hydrocarbons, SVOCs, PCBs, and metals at concentrations greater than Portland Harbor CULs and/or DEQ JSCS SLVs. In addition, the detected concentrations of PCBs, arsenic, and lead exceeded the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction worker and/or excavation worker receptors. However, soil samples collected below the fill material indicated the COPCs were not detected at concentrations greater than applicable DEQ RBCs, Portland Harbor CULs, and DEQ JSCS SLVs. The impacted fill material was encountered near the ground surface and at least 15 feet of “clean” material was present between the impacted fill material and groundwater. Therefore, the COPCs present in the area-wide fill material on and off the project site do not appear to be a source of potential impacts to groundwater at the project site and no further investigation is warranted.

11.4 GROUNDWATER EVALUATION

Groundwater samples indicate that the COPCs are not present at concentrations greater than applicable DEQ RBCs. However, PCE, TCE, benzyl alcohol, arsenic, copper, and lead were detected in groundwater samples at concentrations greater than Portland Harbor CULs and/or DEQ JSCS SLVs.

PCE and TCE were only detected in groundwater samples collected from the shop area. The detected concentrations of PCE and TCE are highest at the up-gradient samples and decreased

down gradient, toward the Willamette River, at a reduction rate 0.87 µg/L per 10 linear feet for PCE. TCE was not detected in the most down-gradient groundwater sample (DP-1W). Based on these results, it appears that the detected concentrations of PCE will decrease to below the DEQ JSCS SLV and Portland Harbor CUL within 10 to 20 feet of the project site, or approximately 840 feet up gradient of the Willamette River. Therefore, it does not appear that the PCE and TCE concentrations detected at the project site represent a significant risk to the Portland Harbor.

Total and dissolved arsenic were detected in groundwater samples DP-1W, DP-2W, DP-3W, DP-14W, DP-15W, DP-17W, and DP-19W at concentrations greater than the Portland Harbor CUL and the DEQ JSCS SLV. However, arsenic is a naturally occurring element and according to a study done by USGS⁶, arsenic concentrations between 10 and 50 µg/L are widespread in the Willamette Basin. Based on the widespread detections of arsenic in groundwater at the project site and the reference study, the detected concentrations of arsenic are representative of background concentrations in the area and do not represent an unacceptable risk to the Willamette River.

Total copper and lead were detected in groundwater samples DP-1W and DP-14W at concentrations greater than the Portland Harbor CULs and the DEQ JSCS SLVs. However, dissolved copper and lead were not detected in groundwater samples DP-1W and DP-14W at concentrations greater than the Portland Harbor CULs and the DEQ JSCS SLVs. It appears that the total detected concentrations of copper and lead are likely associated with suspended solids and do not represent an unacceptable risk to the Willamette River.

Benzyl alcohol was detected in groundwater sample DP-2W at concentrations greater than the DEQ JSCS SLV but was not detected in the down-gradient or up-gradient groundwater samples at concentrations greater than the DEQ JSCS SLV. Therefore, it appears that the detected concentration is localized and does not represent a significant risk to the Portland Harbor.

Based on these results, it is our professional opinion that (1) the contamination associated with the former in-ground hydraulic hoists was adequately remediated during hoist decommissioning, (2) the fill material present at the project site is vertically limited to up to 8.5 feet BGS and is not in contact with or adversely impacting groundwater at the project site, and (3) contaminants identified in groundwater do not represent a significant risk to the Willamette River.

11.5 RECOMMENDATIONS

On the basis of the findings of the multiple investigations at the project site, GeoDesign does not recommend any further subsurface investigation or cleanup regarding soil and groundwater at the project site.

Stormwater collection and conveyance at the project site are accomplished through seven catch basins (CB1 through CB7) and building roof drains. GeoDesign attempted to trace the catch basin piping, but catch basins CB1, CB4, and CB5 were clogged with debris and the discharge locations could not be confirmed. GeoDesign was able to confirm that catch basin CB2 and CB3 discharged to the municipal storm system. Based on this information, GeoDesign inferred that catch basins CB1, CB4, and CB5 also likely discharge to the municipal stormwater system. Based

on these results, GeoDesign recommends collecting a composite sediment sample from the catch basins located on the project site that discharge to the municipal stormwater system.

12.0 LIMITATIONS

This report has been prepared for BCS America LLC. This report is not intended for use by others, and the information contained herein is not applicable to other sites. Reliance by other parties must be approved by GeoDesign, Inc. in accordance with our standard contractual process for third-party reliance. Our interpretations of subsurface conditions are based on data from select soil and groundwater samples collected from this limited area. The results of the analyses only indicate the presence or absence of those chemical constituents analyzed in those discrete sample locations. It is always possible that contamination could exist between the widely spaced exploration locations. Analytical data from the laboratory samples should only be considered as indicators of project site conditions and not a guarantee of the absence of subsurface impact in areas not sampled.

The conclusions presented in this report are based on our observations made during field investigations and chemical analytical data. The findings of this assessment should be considered as a professional opinion based on our evaluation of select and limited data.

Our services have been executed in accordance with the generally accepted practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

♦ ♦ ♦

We appreciate your continued assistance on this project. Please call if you have any questions regarding this submittal.

Sincerely,

GeoDesign, Inc., DBA NV5

Kyle Haggart, G.I.T.
Environmental Staff

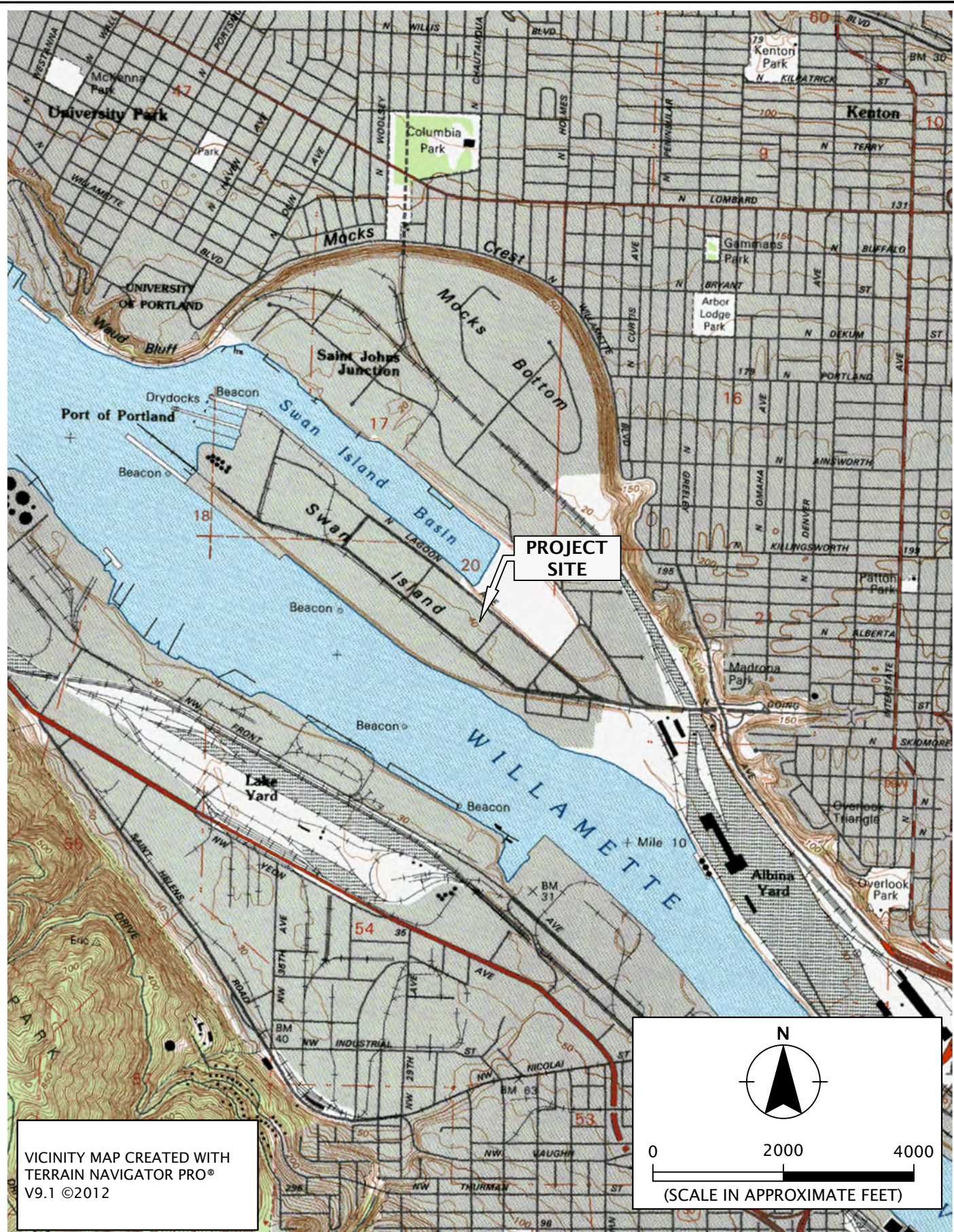
Lon R. Yandell, R.G.
Principal Geologist



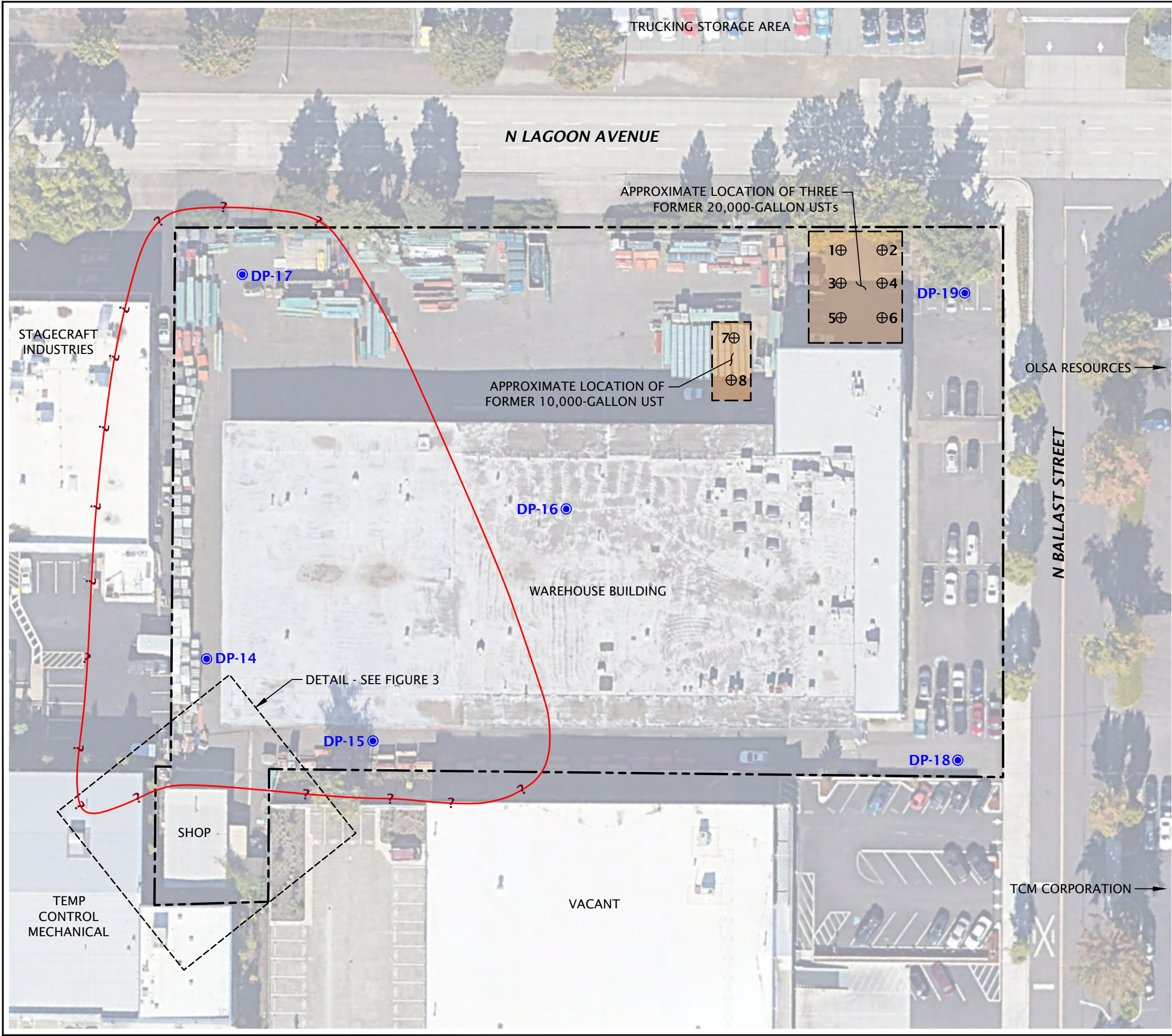
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FIGURES

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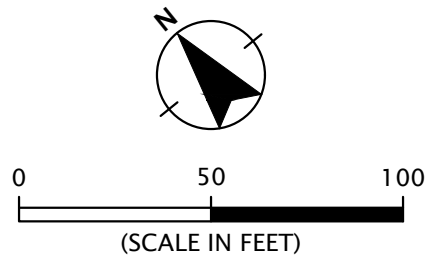


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LEGEND:

- PROJECT SITE BOUNDARY
- DP-14 DIRECT-PUSH BORING (GEODESIGN, 2020)
- 1⊕ CONFIRMATION SOIL SAMPLE (PEMCO, 1991)
- DETAIL AREA (SEE FIGURE 3)
- ESTIMATED EXTENT OF IMPACTED FILL MATERIAL



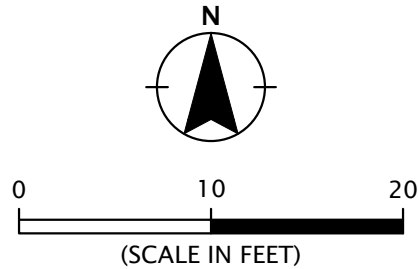
SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
FEBRUARY 28, 2020

	BCSAMERICA-1-01-03	SITE PLAN	
	APRIL 2020	FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR	
		FIGURE 2	



LEGEND:

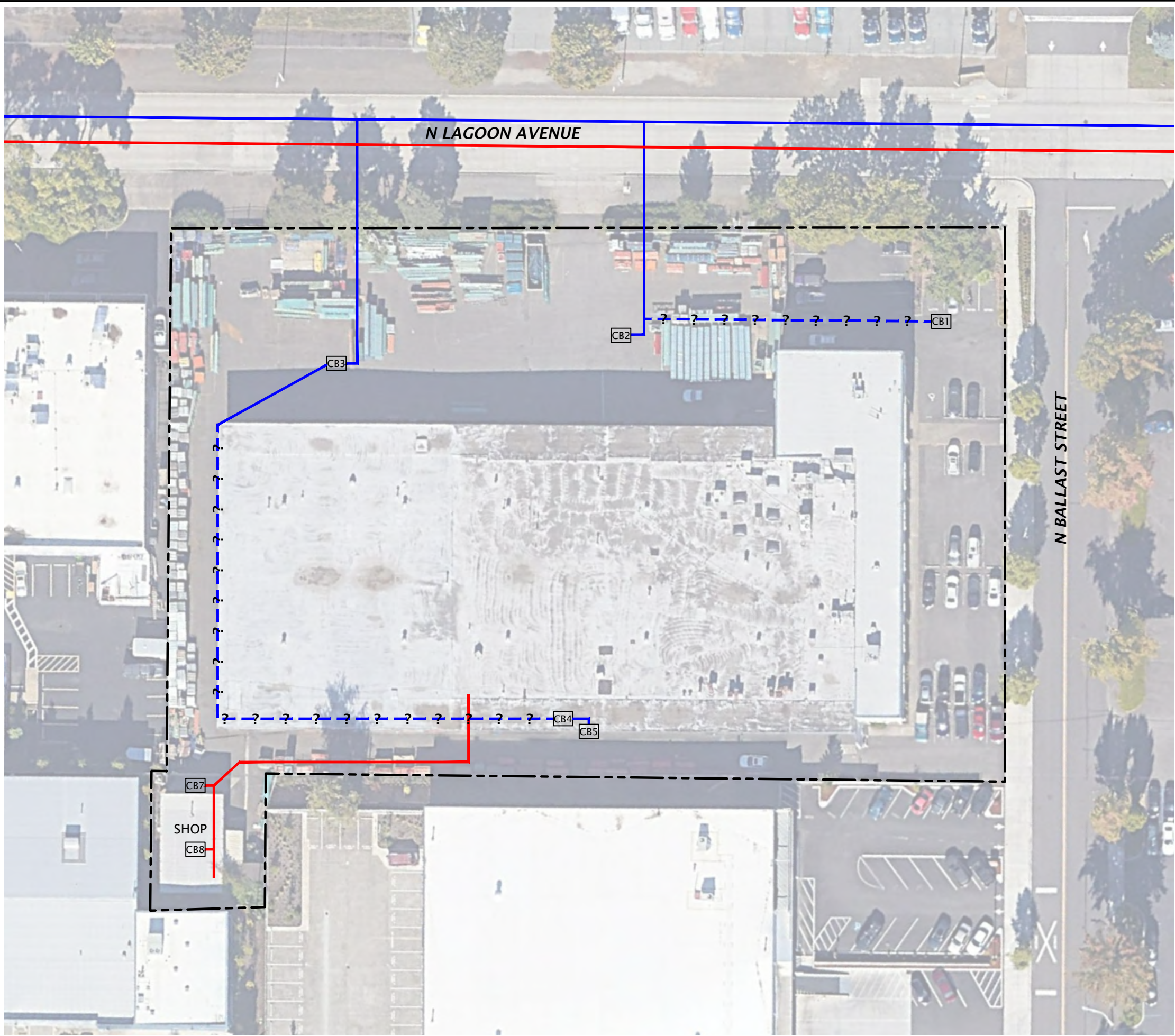
- DP-1 (blue circle with cross) DIRECT-PUSH BORING (GEODESIGN, 2019)
- B-1 (black circle with cross) BORING (PEMCO, 1992)
- B-1 (black dot) BORING (K&S ENVIRONMENTAL, 2019)
- C1 (black square with cross) CONFIRMATION SOIL SAMPLE (K&S ENVIRONMENTAL, 2019)
- 1 (black circle with cross) CONFIRMATION SOIL SAMPLE (PEMCO, 1991)
- 1 (black circle) CONFIRMATION SOIL SAMPLE (PEMCO, 1991)
- (yellow rectangle) UST REMEDIAL EXCAVATION (1991)
- (green rectangle) HYDRAULIC HOIST REMEDIAL EXCAVATION (2019)
- CB (black square with cross) CATCH BASIN



SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
FEBRUARY 28, 2020

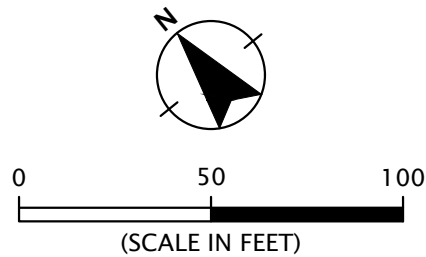
GEODESIGN AN NVIS COMPANY	BCSAMERICA-1-01-03	SITE PLAN - SHOP DETAIL	
	APRIL 2020	FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR	
		FIGURE 3	

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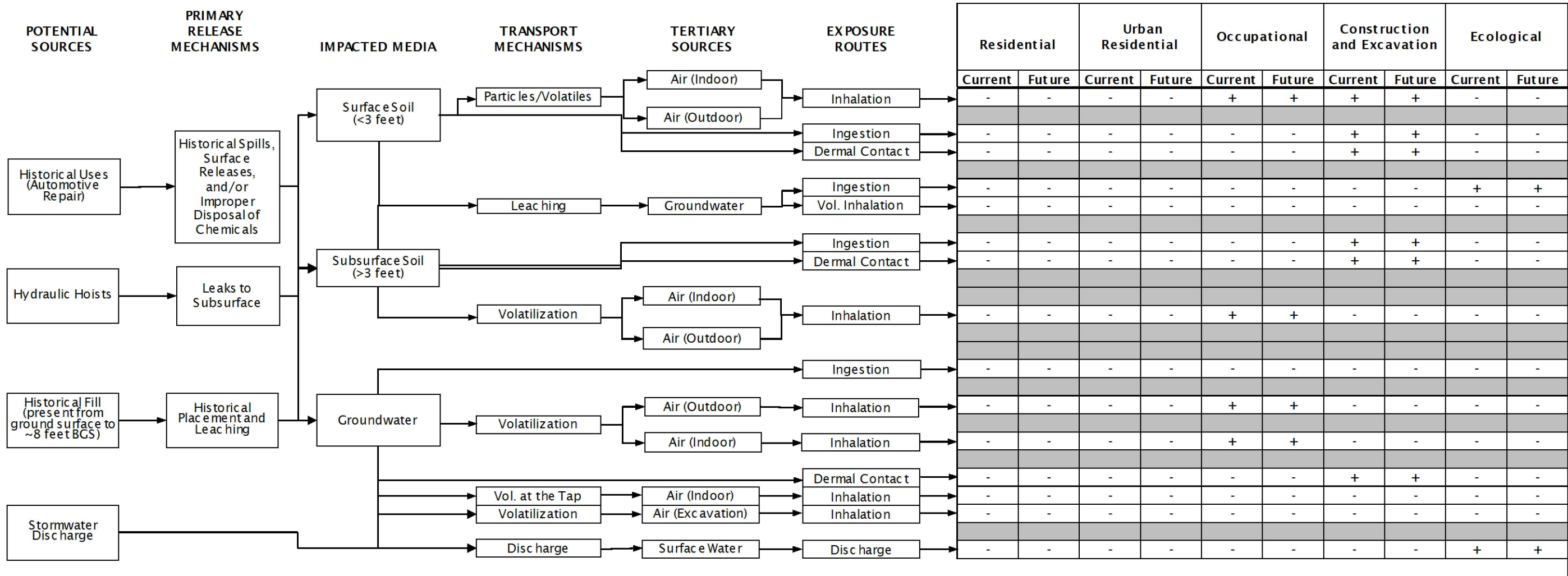
LEGEND:

- PROJECT SITE BOUNDARY
- STORM LINE
- ?-?-? INFERRED STORM LINE
- SANITARY LINE
- CB1 CATCH BASIN



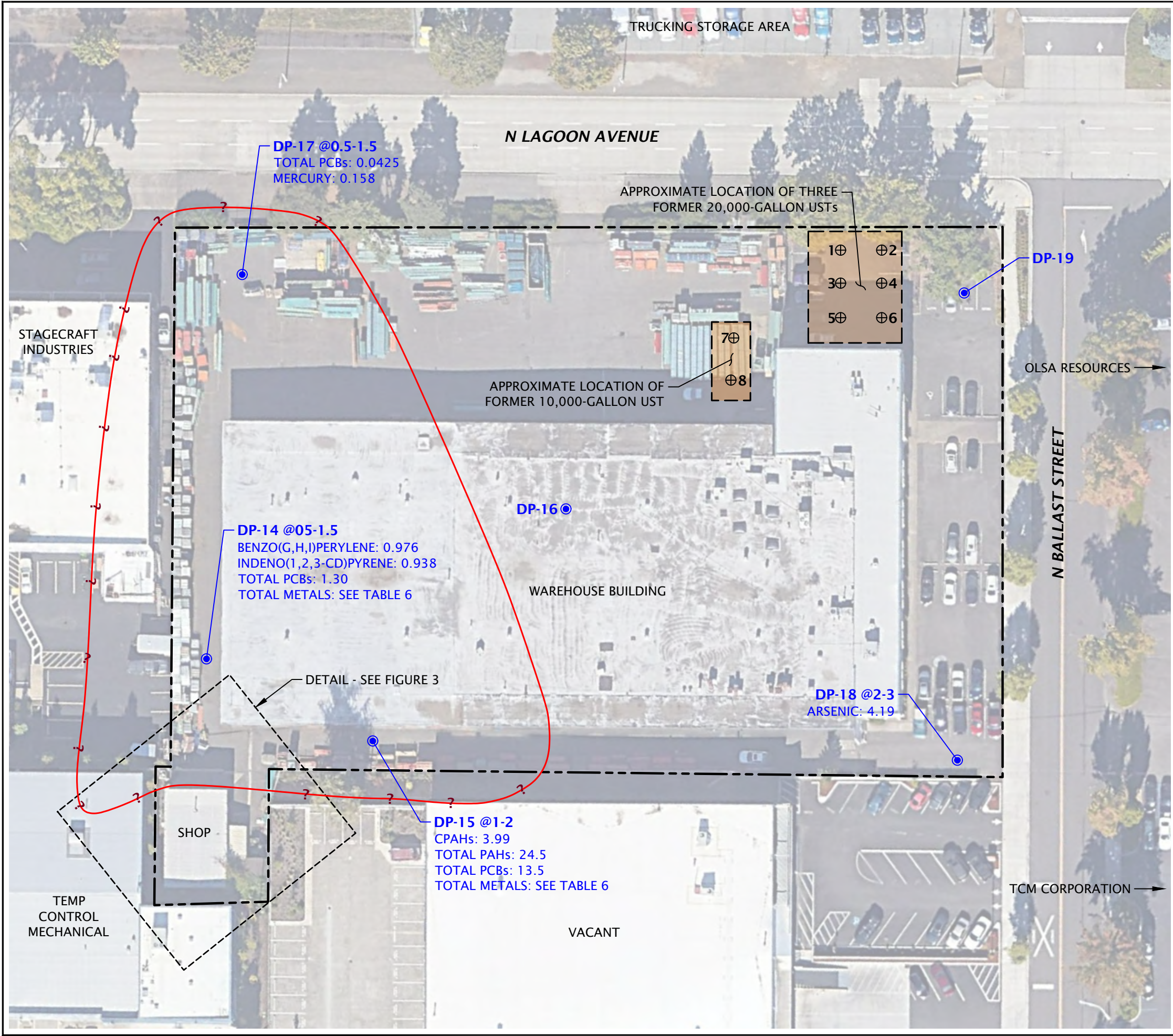
SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
FEBRUARY 28, 2020

	STORMWATER SITE PLAN		FIGURE 4
	BCSAMERICA-1-01-03	APRIL 2020	FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR



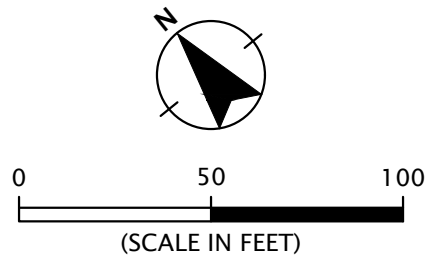
Notes:
+ This route is a primary source of exposure.
- There is no exposure by this route.

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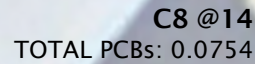
LEGEND:

- PROJECT SITE BOUNDARY
 - DP-14 ● DIRECT-PUSH BORING (GEODESIGN, 2020)
 - 1⊕ CONFIRMATION SOIL SAMPLE (PEMCO, 1991)
 - DETAIL AREA (SEE FIGURE 3)
 - ESTIMATED EXTENT OF IMPACTED FILL MATERIAL
- CONCENTRATIONS EXCEEDING PORTLAND HARBOR CULS AND DEQ JSCS SLVS ARE SHOWN. CONCENTRATIONS IN MG/KG.



SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
FEBRUARY 28, 2020

SOIL CONCENTRATIONS	FIGURE 6	
	BCSAMERICA-1-01-03	APRIL 2020
FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		



TEMP
CONTROL
MECHANICAL

TAX LOT 1100

VACANT

- **DP-12 @5-6.5**
 cPAHs: 8.93
 TOTL PAHs: 49.4
 TOTAL PCBs: 14.36
 TOTAL METALS: SEE TABLE 6

DP-13 @5-6.5
 cPAHs: 9.55
 TOTL PAHs: 46.7
 TOTAL PCBs: 8.38
 TOTAL METALS: SEE TABLE 6

DP-8
⊙
- DP-2 @21-22.5
BEHP: 0.250
TOTAL PCBs: 0.04218

3-3 @7
DIESEL: 25,800
OIL: 17,000
PCE: 10.3
TOTAL PCBs: 0.231

DP-11 @6-7.5
cPAHs: 4.35
TOTL PAHs: 25.8
TOTAL PCBs: 2.70
TOTAL METALS: SEE TABLE 6

C7 @10
TOTAL PCBs: 0.1265

C3 @9
PCE: 3.42
BENZO(G,H,I)PERYLENE: 0.374
TOTAL PCBS: 0.0993

C8 @14
TOTAL PCBs: 0.0754

3-3 @7
DIESEL: 25,800
OIL: 17,000
PCE: 10.3
TOTAL PCBs: 0.231

DP-8
⊙
- DP-2 @21-22.5
BEHP: 0.250
TOTAL PCBs: 0.04218

- **DP-12 @5-6.5**
 cPAHs: 8.93
 TOTL PAHs: 49.4
 TOTAL PCBs: 14.36
 TOTAL METALS: SEE TABLE 6

DP-13 @5-6.5
 cPAHs: 9.55
 TOTL PAHs: 46.7
 TOTAL PCBs: 8.38
 TOTAL METALS: SEE TABLE 6

DP-1 © DIRECT-PUSH BORING (GEODESIGN, 2019)

B-1 BORING (PEMCO, 1992)

B-1 • BORING (K&S ENVIRONMENTAL, 2019)

C1 CONFIRMATION SOIL SAMPLE
(K&S ENVIRONMENTAL, 2019)

1 ⊗ CONFIRMATION SOIL SAMPLE
(PEMCO, 1991)

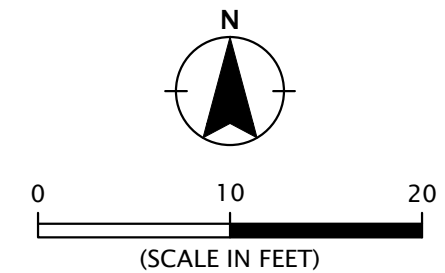
10 CONFIRMATION SOIL SAMPLE
(PEMCO, 1991)

UST REMEDIAL EXCAVATION (1991)

HYDRAULIC HOIST REMEDIAL EXCAVATION
(2019)

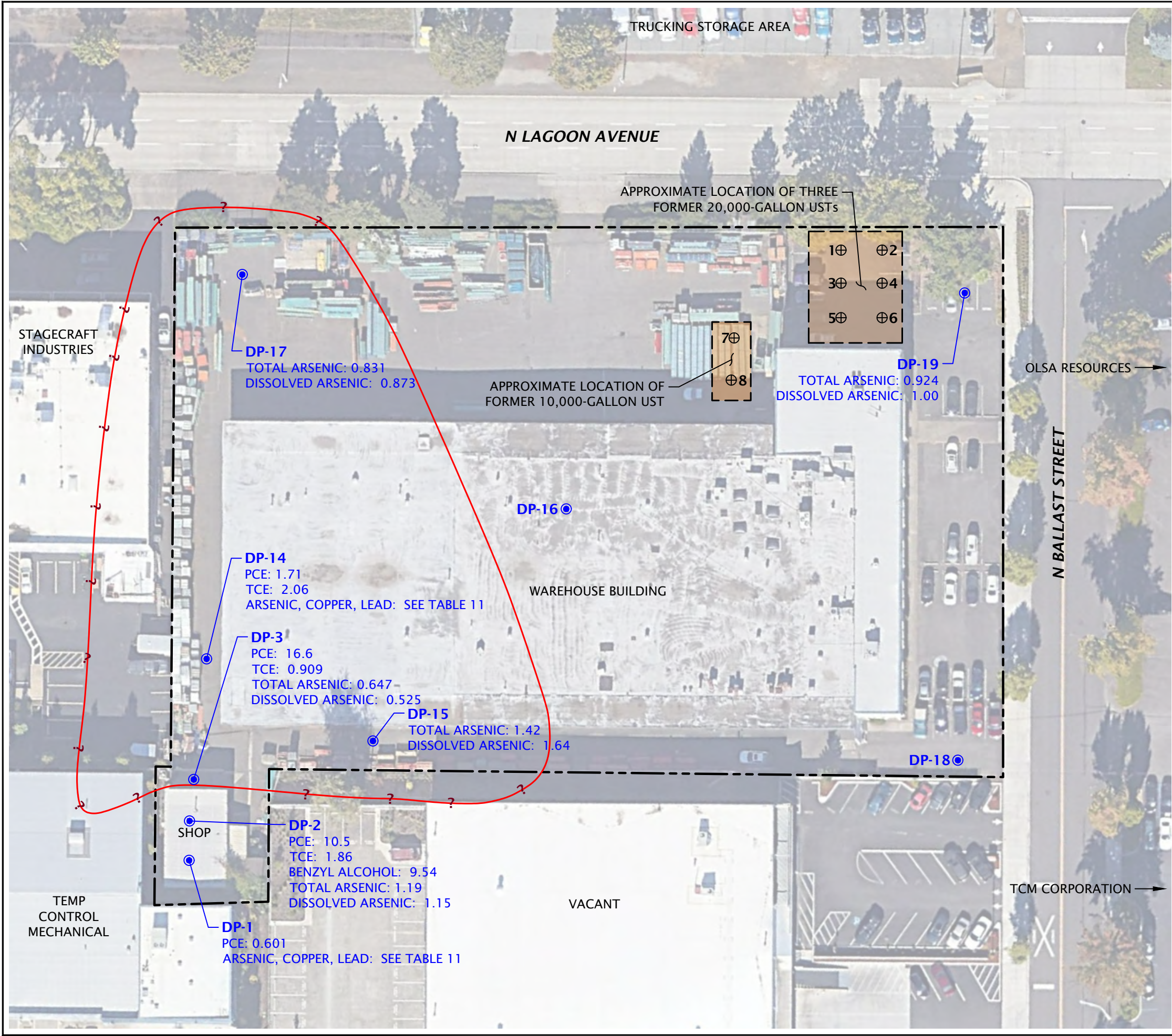
CB CATCH BASIN

CONCENTRATIONS EXCEEDING PORTLAND
HARBOR CULS AND DEQ JSCS SLVS ARE SHOWN.
CONCENTRATIONS IN MG/KG.



SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
FEBRUARY 28, 2020

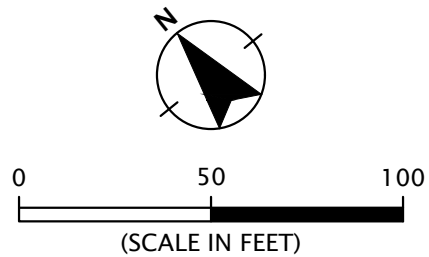
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LEGEND:

- PROJECT SITE BOUNDARY
- DP-14 DIRECT-PUSH BORING (GEODESIGN, 2020)
- 1⊕ CONFIRMATION SOIL SAMPLE (PEMCO, 1991)
- ESTIMATED EXTENT OF IMPACTED FILL MATERIAL

CONCENTRATIONS EXCEEDING PORTLAND HARBOR CULS AND DEQ JSCS SLVS ARE SHOWN. CONCENTRATIONS IN $\mu\text{G/L}$.



SITE PLAN BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®, FEBRUARY 28, 2020

GROUNDWATER CONCENTRATIONS		FIGURE 8
FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		
BCSAMERICA-1-01-03	APRIL 2020	

TABLES

TABLE 1 Summary of Soil Sample Chemical Analytical Results Petroleum Hydrocarbons Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon											
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)		Total Petroleum Hydrocarbons (mg/kg)	TPH Method 418.1 (mg/kg)
				Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range		
Confirmation Soil Samples - Northeastern USTs											
#1	14	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#2	14	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#3	14	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#4	14	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#5	14	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#6	14	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#7	12	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
#8	12	Unknown	09/27/91	ND	ND	ND	--	--	--	--	--
Confirmation Soil Samples - Shop USTs											
1	8	Unknown	10/17/91	ND	ND	DET	--	--	--	--	970
2	8	Unknown	10/17/91	ND	ND	DET	--	--	--	--	1,200
3	7	Unknown	10/17/91	ND	ND	DET	--	--	--	--	2,300
4	8	Unknown	10/17/91	ND	ND	DET	--	--	--	--	990
1	6	Unknown	11/18/91	--	--	--	--	--	--	--	690
2	7	Unknown	11/18/91	--	--	--	--	--	--	--	590
3	9	Unknown	11/18/91	--	--	--	--	--	--	--	260
4	7	Unknown	11/18/91	--	--	--	--	--	--	--	190
5	7.5	Unknown	11/18/91	--	--	--	--	--	--	--	930
6	8	Unknown	11/18/91	--	--	--	--	--	--	--	390
7	8.5 - 9	Unknown	11/18/91	--	--	--	--	--	--	--	1,400
8	7.5	Unknown	11/18/91	--	--	--	--	--	--	--	220
9	7	Unknown	11/18/91	--	--	--	--	--	--	--	910
10	7.5	Unknown	11/18/91	--	--	--	--	--	--	--	1,600
11	6.5	Unknown	11/18/91	--	--	--	--	--	--	--	900
12	6.5-7	Unknown	11/18/91	--	--	--	--	--	--	--	210
K&S Borings											
B-1 - #1	4	Native	01/09/19	ND	ND	ND	--	--	--	--	--
B-2 - #2	4	Native	01/09/19	ND	ND	DET	--	25.0 U	402	427	--
B-3 - #3*	7	Native	01/09/19	--	--	--	70.5	25,800	17,000	42,871	--

TABLE 1
Summary of Soil Sample Chemical Analytical Results
Petroleum Hydrocarbons
Former Automatic Vending Company
5001 North Lagoon Avenue
Portland, Oregon

Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)		Total Petroleum Hydrocarbons (mg/kg)	TPH Method 418.1 (mg/kg)
				Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range		
B-4 - #4	8	Native	01/09/19	--	--	--	--	25.0 U	610	635	--
B-3 - #5*	9	Native	01/09/19	--	--	--	--	357 U	10,200	10,557	--
Confirmation Soil Samples - Hydraulic Hoist Remedial Excavation											
C1	12	Native	03/08/19	--	--	--	--	25.0 U	1,450	1,475	--
C2	12	Native	03/08/19	--	--	--	--	25.0 U	1,060	1,085	--
C3	9	Native	03/08/19	--	--	--	--	948 U	3,600	4,548	--
C4	9	Native	03/08/19	--	--	--	--	25.0 U	50.0 U	75.0	--
C5	9	Native	03/08/19	--	--	--	--	25.0 U	60.7	85.7	--
C6	9	Native	03/08/19	--	--	--	--	25.0 U	50.0 U	75.0	--
C7	10	Native	03/08/19	--	--	--	--	276	326	602	--
C8	14	Native	03/08/19	--	--	--	--	25.0 U	718	743	--
GeoDesign Borings											
DP-1	11-12.5	Native	07/18/19	--	--	--	3.04 U	11.1 U	22.2 U	36.3	--
DP-2	11-12.5	Native	07/18/19	--	--	--	3.10 U	9.64 U	19.3 U	32.0	--
DP-2	21-22.5	Native	07/18/19	--	--	--	2.89 U	9.81 U	261	274	--
DP-2	25-26.5	Native	07/18/19	--	--	--	--	11.6 U	23.3 U	34.9	--
DP-3	10-11.5	Native	07/18/19	--	--	--	2.83 U	9.77 U	19.5 U	32.1	--
DP-4	11.5-13	Native	07/19/19	--	--	--	2.87 U	9.90 U	19.8 U	32.6	--
DP-5	10-11.5	Native	07/19/19	--	--	--	3.12 U	10.6 U	21.3 U	35.0	--
DP-6	12-13.5	Native	07/19/19	--	--	--	2.76 U	9.72 U	19.4 U	31.9	--
DP-7	11.5-13	Native	07/19/19	--	--	--	2.59 U	10.4 U	20.7 U	33.7	--
DP-8	11.5-13	Native	07/19/19	--	--	--	3.01 U	10.1 U	20.1 U	33.2	--
DP-9	11-12.5	Native	07/19/19	--	--	--	3.18 U	10.6 U	21.3 U	35.1	--
DP-10	6-7.5	Native	07/19/19	--	--	--	3.24 U	10.3 U	20.5 U	34.0	--
DP-11	6-7.5	Fill	07/19/19	--	--	--	15.0	218 U	972	1,205	--
DP-11	10-11.5	Native	07/19/19	--	--	--	4.42	10.6 U	21.2 U	36.2	--
DP-12	5-6.5	Fill	07/19/19	--	--	--	14.5	213 U	1,360	1,588	--
DP-12	10-11.5	Native	07/19/19	--	--	--	2.99 U	10.0 U	20.1 U	33.1	--
DP-13	5-6.5	Fill	07/19/19	--	--	--	22.0	315 U	1,680	2,017	--
DP-13	10-11.5	Native	07/19/19	--	--	--	3.38 U	10.3 U	20.5 U	34.2	--
DP-14	0.5-1.5	Fill	07/16/20	--	--	--	2.90 U	10.6 U	427	441	--

TABLE 1 Summary of Soil Sample Chemical Analytical Results Petroleum Hydrocarbons Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon											
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)		Total Petroleum Hydrocarbons (mg/kg)	TPH Method 418.1 (mg/kg)
				Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range		
DP-14	1.5-2.5	Native	07/16/20	--	--	--	2.93 U	10.8 U	43.0 U	56.7	--
DP-15	1-2	Fill	07/16/20	--	--	--	8.48	225 U	1,940	2,173	--
DP-15	2.5-3.5	Native	07/16/20	--	--	--	2.50 U	10.1 U	40.5 U	53.1	--
DP-16	6-7	Native	07/16/20	--	--	--	2.96 U	10.2 U	40.7 U	53.9	--
DP-17	0.5-1.5	Fill	07/16/20	--	--	--	3.20 U	11.8 U	47.1	62.1	--
DP-17	2-3	Native	07/16/20	--	--	--	3.13 U	12.1 U	30.1	45.3	--
DP-18	2-3	Fill	07/16/20	--	--	--	3.25 U	12.2 U	29.0	44.5	--
DP-19	0.5-1.5	Fill	07/16/20	--	--	--	3.18 U	11.5 U	23.0 U	37.7	--
Off-Site Borings											
#1 B-1	5-6.5	Fill	05/05/92	--	--	--	--	--	--	--	1,100
#2 B-1	7.5-8	Fill	05/05/92	--	--	--	--	--	--	--	1,400
#3 B-2	4-5.5	Fill	05/05/92	--	--	--	--	--	--	--	1,800
#4 B-2C	7-8.5	Fill	05/05/92	--	--	--	--	--	--	--	ND
#5 B-3	4-5.5	Fill	05/05/92	--	--	--	--	--	--	--	66
#6 B-3	7-8.5	Fill	05/05/92	--	--	--	--	--	--	--	2,000
DEQ Generic RBCs ³											
Soil Ingestion, Dermal Contact, and Inhalation											
Construction Worker				NE	NE	NE	9,700	4,600	NE	6,600 ³	NE
Excavation Worker				NE	NE	NE	>Max	>Max	NE	>Max ³	NE
Volatilization to Outdoor Air											
Occupational				NE	NE	NE	69,000	>Max	NE	>Max ³	NE
Vapor Intrusion into Buildings											
Occupational				NE	NE	NE	>Max	>Max	NE	>Max ³	NE
EPA Portland Harbor CULs ⁴				NE	NE	NE	NE	91	NE	NE	NE
DEQ JSCS SLVs ⁵				NE	NE	NE	NE	NE	NE	NE	NE

TABLE 1 Summary of Soil Sample Chemical Analytical Results Petroleum Hydrocarbons Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon											
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)		Total Petroleum Hydrocarbons (mg/kg)	TPH Method 418.1 (mg/kg)
				Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range		
Notes: 1. Total petroleum hydrocarbons calculated by summing gasoline-, diesel-, and oil-range hydrocarbons. Reporting limit used for non-detects 2. DEQ Generic RBCs dated May 2018 3. Site-specific RBCs were calculated using TPH Fraction data from soil sample DP-12(5-6.5) presented in Table 2. One-half the detection limit was used for non-detects. 4. EPA <i>Record of Decision Portland Harbor Superfund Site Portland, Oregon</i>, dated January 2017; Table 17 Riverbank Soil/Sediment CULs. 5. DEQ <i>Portland Harbor Joint Source Control Strategy</i> dated December 2005; Table 3.1 Initial Upland Soil and Stormwater Sediment Evaluation SLVs. DET: detected >Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario. U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection. Shading indicates analyte detection at a concentration greater than regulatory screening level. Italics indicates the laboratory reporting limit exceeds DEQ JSCS SLVs. --: not analyzed											

TABLE 2 Summary of Soil Sample Chemical Analytical Results EPH and VPH Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon																							
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	EPH Method NWEPH (mg/kg)												VPH Method NWVPH (mg/kg)							
				C8-C10 Aliphatic	C10-C12 Aliphatic	C12-C16 Aliphatic	C16-C21 Aliphatic	C21-C34 Aliphatic	C8-C10 Aromatic	C10-C12 Aromatic	C12-C16 Aromatic	C16-C21 Aromatic	C21-C34 Aromatic	C5-C6 Aliphatic	C6-C8 Aliphatic	C8-C10 Aliphatic	C10-C12 Aliphatic	C8-C10 Aromatic	C10-C12 Aromatic	C12-C13 Aromatic			
DP-1	11-12.5	Native	07/18/19	25.9 U, C	13.0 U	13.0 U	13.0 U	13.0 U	13.0 U,C	13.0 U,C	13.0 U	13.0 U	13.0 U	3.69 U	5.28 U	2.96 U	3.17 U	6.33 U	1.27 U	14.8 U			
DP-2	11-12.5	Native	07/18/19	18.8 U, C	9.42 U	9.42 U	9.42 U	9.42 U	9.42 U,C	9.42 U,C	9.42 U	9.42 U	9.42 U	2.04 U	2.91 U	1.63 U	1.74 U	3.49 U	0.698 U	8.14 U			
DP-2	21-22.5	Native	07/18/19	20.4 U, C	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U,C	10.2 U,C	10.2 U	10.2 U	10.2 U	1.96 U	2.81 U	1.57 U,Q	1.68 U	3.37 U	0.880 Q	7.85 U,Q			
DP-3	10-11.5	Native	07/18/19	24.4 U, C	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U,C	12.2 U,C	12.2 U	12.2 U	12.2 U	2.30 U	3.29 U	1.84 U	1.97 U	3.95 U	0.790 U	9.21 U			
DP-5	10-11.5	Native	07/19/19	20.5 U, C	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U,C	10.2 U,C	10.2 U	10.2 U	10.2 U	2.01 U	2.87 U	1.61 U	1.72 U	3.44 U	0.688 U	8.03 U			
DP-10	6-7.5	Native	07/19/19	20.9 U, C	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U,C	10.4 U,C	10.4 U	10.4 U	10.4 U	2.07 U	2.95 U	1.65 U	1.77 U	3.54 U	0.709 U	8.27 U			
DP-11	6-7.5	Fill	07/19/19	23.8 U, C	11.9 U	11.9 U	11.9 U	17.1	11.9 U,C	11.9 U,C	11.9 U	17.8	62.4	2.90 U	4.14 U	2.32 U	2.49 U	4.97 U	1.25	11.6 U			
DP-11	10-11.5	Native	07/19/19	18.9 U, C	9.46 U	9.46 U	9.46 U	9.46 U	9.46 U,C	9.46 U,C	9.46 U	9.46 U	9.46 U	2.89 U	4.14 U	2.32 U,Q	2.48 U	4.96 U	0.992 U,Q	11.6 U,Q			
DP-12	5-6.5	Fill	07/19/19	21.8 U, C	10.9 U	62.9	78.8	26.9	10.9 U,C	10.9 U,C	10.9 U	16.1	54.0	2.28 U	3.26 U	1.83 U	2.12	3.91 U	6.63	9.13 U			
DP-12	10-11.5	Native	07/19/19	21.4 U, C	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U,C	10.7 U,C	10.7 U	10.7 U	10.7 U	1.86 U	2.66 U	1.49 U,Q	1.60 U	3.20 U	0.639 U,Q	7.46 U,Q			
DP-13	5-6.5	Fill	07/19/19	19.8 U, C	9.88 U	11.4	58.3	158	9.88 U,C	9.88 U,C	9.88 U	25.4	128	1.93 U	2.76 U	1.83	9.89	3.32 U	10.4	11.8			
DP-13	10-11.5	Native	07/19/19	22.4 U, C	11.2 U	11.2 U	11.2 U	11.2 U	11.2 U,C	11.2 U,C	11.2 U	11.2 U	11.2 U	2.58 U	3.68 U	2.06 U,Q	2.21 U	4.42 U	0.884 U,Q	10.3 U,Q			
DP-14	0.5-1.5	Fill	07/16/20	22.7 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	2.20 U	3.15 U	1.76 U	1.89 U	3.78 U	6.44	8.81 U			
DP-15	1-2	Fill	07/16/20	19.9 U	9.97 U	9.97 U	11.6	172	9.97 U	9.97 U	9.97 U	46.2	205	1.65 U	2.35 U	1.32 U	3.46	2.82 U	46.6	10.5			
EPA Portland Harbor CULs ¹				NE	2.6	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
DEQ JSCS SLVs ²				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Notes: 1. EPA Record of Decision Portland Harbor Superfund Site Portland, Oregon, dated January 2017; Table 17 Riverbank Soil/Sediment CULs 2. DEQ Portland Harbor Joint Source Control Strategy dated December 2005; Table 3.1 Initial Upland Soil and Stormwater Sediment Evaluation SLVs C: value is not within control limits Q: analyte with an initial or continuing calibration that does not meet established acceptance criteria U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection. Italics indicates the laboratory reporting limit exceeds Portland Harbor CULs. ---: not analyzed																							

TABLE 3
Summary of Soil Sample Chemical Analytical Results
VOCs
Former Automatic Vending Company
5001 North Lagoon Avenue
Portland, Oregon

Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	VOCs ¹ EPA Methods 5035A and 8260C (mg/kg)																							
				n-Butylbenzene		Ethylbenzene		4-Methyl-2-Pentanone (MiBK)		Isopropylbenzene		n-propylbenzene		Naphthalene	PCE	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylenes	o-Xylenes							
K&S Borings																											
B-3 - #3*	7	Native	01/09/19	0.133	M-02	0.0338		0.626	U	0.103		0.239		1.18		10.3		0.115		0.987		0.577		0.162		0.135	
Confirmation Soil Samples - Hydraulic Hoist Remedial Excavation																											
C1	12	Unknown	03/08/19	0.0516	U	0.0258	U	0.0516	U	0.0516	U	0.0258	U	0.103	U	1.66		0.0516	U	0.0516	U	0.0516	U	0.0516	U	0.0258	U
C2	12	Unknown	03/08/19	0.0501	U	0.0251	U	0.0501	U	0.0501	U	0.0251	U	0.100	U	0.845		0.0501	U	0.0501	U	0.0501	U	0.0501	U	0.0251	U
C3	9	Unknown	03/08/19	0.0588	U	0.0294	U	0.588	U	0.0588	U	0.0294	U	0.118	U	3.42		0.0588	U	0.0588	U	0.0588	U	0.0588	U	0.0294	U
C4	9	Unknown	03/08/19	0.0542	U	0.0271	U	0.542	U	0.0542	U	0.0271	U	0.108	U	0.0339		0.0542	U	0.0542	U	0.0271	U	0.0542	U	0.0271	U
C5	9	Unknown	03/08/19	0.0495	U	0.0248	U	0.495	U	0.0495	U	0.0248	U	0.0991	U	0.0248	U	0.0495	U	0.0495	U	0.0495	U	0.0495	U	0.0248	U
C6	9	Unknown	03/08/19	0.0512	U	0.0256	U	0.512	U	0.0512	U	0.0256	U	0.102	U	0.0256	U	0.0512	U	0.0512	U	0.0512	U	0.0512	U	0.0256	U
C7	10	Unknown	03/08/19	0.0618	U	0.0309	U	0.618	U	0.0618	U	0.0309	U	0.124	U	0.175		0.0618	U	0.0618	U	0.0618	U	0.0618	U	0.0309	U
C8	14	Unknown	03/08/19	0.0634	U	0.0317	U	0.634	U	0.0634	U	0.0317	U	0.127	U	0.0563		0.0634	U	0.0634	U	0.0634	U	0.0634	U	0.0317	U
GeoDesign Borings																											
DP-1	11-12.5	Native	07/18/19	0.0304	U	0.0304	U	0.304	U	0.0152	U	0.0152	U	0.0608	U	0.0152	U	0.0304	U	0.0304	U	0.0304	U	0.0304	U	0.0304	U
DP-2	11-12.5	Native	07/18/19	0.0310	U	0.0155	U	0.310	U	0.0310	U	0.0155	U	0.0620	U	0.0155	U	0.0310	U	0.0310	U	0.0310	U	0.0310	U	0.0310	U
DP-2	21-22.5	Native	07/18/19	0.0289	U	0.0144	U	0.289	U	0.0289	U	0.0144	U	0.0578	U	0.0150	J	0.0289	U	0.0289	U	0.0289	U	0.0289	U	0.0289	U
DP-2	25-26.5	Native	07/18/19	0.0374	U	0.0187	U	0.374	U	0.0374	U	0.0187	U	0.0749	U	0.0187	U	0.0374	U	0.0374	U	0.0374	U	0.0374	U	0.0187	U
DP-3	10-11.5	Native	07/18/19	0.0283	U	0.0141	U	0.283	U	0.0283	U	0.0141	U	0.0565	U	0.0141	U	0.0283	U	0.0283	U	0.0283	U	0.0283	U	0.0283	U
DP-4	11.5-13	Native	07/19/19	0.0287	U	0.0144	U	0.287	U	0.0287	U	0.0144	U	0.0575	U	0.0144	U	0.0287	U	0.0287	U	0.0287	U	0.0287	U	0.0287	U
DP-5	10-11.5	Native	07/19/19	0.0312	U	0.0156	U	0.312	U	0.0312	U	0.0156	U	0.0623	U	0.0156	U	0.0312	U	0.0312	U	0.0312	U	0.0312	U	0.0312	U
DP-5	15-16.5	Native	07/19/19	0.0329	U	0.0164	U	0.329	U	0.0329	U	0.0164	U	0.0657	U	0.0164	U	0.0329	U	0.0329	U	0.0329	U	0.0329	U	0.0329	U
DP-6	12-13.5	Native	07/19/19	0.0276	U	0.0138	U	0.276	U	0.0276	U	0.0138	U	0.0553	U	0.0138	U	0.0276	U	0.0276	U	0.0276	U	0.0276	U	0.0276	U
DP-7	11.5-13	Native	07/19/19	0.0259	U	0.0129	U	0.259	U	0.0259	U	0.0129	U	0.0518	U	0.0129	U	0.0259	U	0.0259	U	0.0259	U	0.0259	U	0.0259	U
DP-8	11.5-13	Native	07/19/19	0.0301	U	0.0301	U	0.301	U	0.0301	U	0.0301	U	0.0602	U	0.0151	U	0.0301	U	0.0301	U	0.0301	U	0.0301	U	0.0301	U
DP-9	11-12.5	Native	07/19/19	0.0318	U	0.0318	U	0.318	U	0.0318	U	0.0318	U	0.0635	U	0.0159	U	0.0318	U	0.0318	U	0.0318	U	0.0318	U	0.0318	U
DP-10	6-7.5	Native	07/19/19	0.0324	U	0.0324	U	0.324	U	0.0324	U	0.0324	U	0.0648	U	0.0162	U	0.0324	U	0.0324	U	0.0324	U	0.0324	U	0.0324	U
DP-11	6-7.5	Fill	07/19/19	0.0326	U	0.0326	U	0.831		0.0326	U	0.0326	U	0.0652	U	0.0978		0.0326	U	0.0326	U	0.0326	U	0.0652	U	0.0482	
DP-11	10-11.5	Native	07/19/19	0.0262	U	0.0131	U	0.262	U	0.0262	U	0.0131	U	0.105	U	0.0131	U	0.0262	U	0.0262	U	0.0262	U	0.0262	U	0.0131	U
DP-12	5-6.5	Fill	07/19/19	0.0283	U	0.0153	J	0.351	J	0.0283	U	0.0141	U	0.0565	U	0.105		0.0283	U	0.0401	J	0.0571		0.0492	J	0.0922	
DP-12	10-11.5	Native	07/19/19	0.0299	U	0.0149	U	0.299	U	0.0299	U	0.0149	U	0.119	U	0.0149	U	0.0299	U	0.0299	U	0.0299	U	0.0299	U	0.0149	U
DP-13	5-6.5	Fill	07/19/19	0.0390	U	0.0195	J	0.390	U	0.0390	U	0.0390	U	0.0780	U	0.141		0.0390	U	0.0585	J	0.0405	J	0.0468	J	0.0678	
DP-13	10-11.5	Native	07/19/19	0.0338	U	0.0169	U	0.338	U	0.0338	U	0.0169	U	0.135	U	0.0169	U	0.0338	U	0.0338	U	0.0338	U	0.0338	U	0.0169	U
DP-14	0.5-1.5	Fill	07/16/20	0.0290	U	0.0145	U	0.290	U	0.0290	U	0.0145	U	0.0581	U	0.0145	U	0.0290	U	0.0290	U	0.0290	U	0.0290	U	0.0145	U
DP-14	1.5-2.5	Native	07/16/20	0.0293	U	0.0146	U	0.293	U	0.0293	U	0.0146	U	0.0586	U	0.0146	U	0.0293	U	0.0293	U	0.0293	U	0.0293	U	0.0146	U
DP-15	1-2	Fill	07/16/20	0.0294	U	0.0147	U	0.294	U	0.0294	U	0.0147	U	0.0588	U	0.0147	U	0.0294	U	0.0294	U	0.0294	U	0.0294	U	0.0147	U
DP-15	2.5-3.5	Native	07/16/20	0.0250	U	0.0125	U	0.250	U	0.0250	U	0.0125	U	0.0500	U	0.0125	U	0.0250	U	0.0250	U	0.0250	U	0.0250	U	0.0125	U
DP-16	6-7	Native	07/16/20	0.0296	U	0.0148	U	0.296	U	0.0296	U	0.0148	U	0.0591	U	0.0148	U	0.0296	U	0.0296	U	0.0296	U	0.0296	U	0.0148	U
DP-17	0.5-1.5	Fill	07/16/20	0.0320	U	0.0160	U	0.320	U	0.0320	U	0.0160	U	0.0640	U	0.0160	U	0.0320	U	0.0320	U	0.0320	U	0.0320	U	0.0160	U
DP-17	2-3	Native	07/16/20	0.0313	U	0.0157	U	0.313	U	0.0313	U	0.0157	U	0.0626	U	0.0157	U	0.0313	U	0.0313	U	0.0313	U	0.0313	U	0.0157	U
DP-18	2-3	Fill	07/16/20	0.0325	U	0.0163	U	0.325	U	0.0325	U	0.0163	U	0.0651	U	0.0163	U	0.0325	U	0.0325	U	0.0325	U	0.0325	U	0.0163	U
DP-19	0.5-1.5	Fill	07/16/20	0.0318	U	0.0159	U	0.318	U	0.0318	U	0.0159	U	0.0637	U	0.0159	U	0.0318	U	0.0318	U	0.0318	U	0.0318	U	0.0159	U

TABLE 3 Summary of Soil Sample Chemical Analytical Results VOCs Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon															
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	VOCs ¹ EPA Methods 5035A and 8260C (mg/kg)											
				n-Butylbenzene	Ethylbenzene	4-Methyl-2-Pentanone (MiBK)	Isopropylbenzene	n-propylbenzene	Naphthalene	PCE	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylenes	o-Xylenes
DEQ Generic RBCs ²															
<i>Soil Ingestion, Dermal Contact, and Inhalation</i>															
Construction Worker			NE	1,700	NE	27,000	NE	580	1,800	28,000	2,900	2,900	20,000	20,000	
Excavation Worker			NE	49,000	NE	750,000	NE	16,000	50,000	770,000	81,000	81,000	560,000	560,000	
<i>Volatilization to Outdoor Air</i>															
Occupational			NE	160	NE	>Csat	NE	83	>Csat	>Csat	>Csat	>Csat	>Csat	>Csat	
<i>Vapor Intrusion into Buildings</i>															
Occupational			NE	17	NE	>Csat	NE	83	36	>Csat	>Csat	>Csat	>Csat	>Csat	
EPA Portland Harbor CULs ³			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	
DEQ JSCS SLVs ⁴			NE	NE	NE	NE	NE	0.561	0.5	NE	9.2	NE	NE	NE	
Notes: 1. Only VOCs detected during this investigation are listed. 2. DEQ Generic RBCs dated May 2018 3. EPA <i>Record of Decision Portland Harbor Superfund Site Portland, Oregon</i> , dated January 2017; Table 17 Riverbank Soil/Sediment CULs 4. DEQ <i>Portland Harbor Joint Source Control Strategy</i> dated December 2005; Table 3.1 Initial Upland Soil and Stormwater Sediment Evaluation SLVs >Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present. J: Estimated result. Result detected below the lowest point of the calibration curve, but above the specified MDL. M-02: Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated. U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection. Shading indicates analyte detection at a concentration greater than regualtory screening level.															

TABLE 4 Summary of Soil Sample Chemical Analytical Results SVOCs Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon																															
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	SVOCs EPA Method 8270D-SIM (mg/kg)																							cPAHs	Total PAHs			
				Anthracene	Acenaphthene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Benzyl Alcohol	BEHP	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	PCP	Phenanthrene	Pyrene	1-Methylnaphthalene			2-Methylnaphthalene	Phenol	
Confirmation Soil Samples - Hydraulic Hoist Remedial Excavation																															
C1	12	Unknown	03/08/19	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0804	0.0102 U	--	--	--	0.0102 U	0.0102 U	--	0.0102 U	0.0102 U	0.0102 U	0.0102 U	--	0.0102 U	0.0102 U	--	--	--	0.0234	0.2334	
C2	12	Unknown	03/08/19	0.0105 U	0.0105 U	0.0105 U	0.0105 U	0.0105 U	0.0105 U	0.0105 U	0.0518	0.0105 U	--	--	--	0.0105 U	0.0105 U	--	0.0105 U	0.0105 U	0.0105 U	0.0105 U	--	0.0105 U	0.0105 U	--	--	--	0.0239	0.2093	
C3	9	Unknown	03/08/19	0.0519 U	0.0519 U	0.0519 U	0.0519 U	0.0519 U	0.0519 U	0.0519 U	0.374	0.0519 U	--	--	--	0.0519 U	0.0519 U	--	0.0519 U	0.0519 U	0.0519 U	0.0519 U	--	0.0519 U	0.0519 U	--	--	--	0.119	1.1525	
C7	10	Unknown	03/08/19	0.011	0.0107 U	0.0147	0.0368 M-05	0.0761	0.0912 M-05	0.0785	0.0252 M-05	--	--	--	--	0.0476	0.0107 U	--	0.0569	0.0107 U	0.0716	0.0107 U	--	0.0166	0.0893	--	--	--	0.104	0.6583	
C8	14	Unknown	03/08/19	0.0510 U	0.0510 U	0.0510 U	0.0510 U	0.0510 U	0.0510 U	0.0510 U	0.0781	0.0510 U	--	--	--	0.0510 U	0.0510 U	-- U	0.0510 U	0.0510 U	0.0510 U	0.0510 U	--	0.0510 U	0.0586	--	--	--	0.1154	0.8507	
GeoDesign Borings																															
DP-1	11-12.5	Native	07/18/19	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	--	--	--	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U	--	0.00549 U	0.00549 U	0.00549 U	0.00549 U	--	NC	NC	
DP-2	11-12.5	Native	07/18/19	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	--	--	--	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	0.00539 U	--	0.00539 U	0.00539 U	0.00539 U	0.00539 U	--	NC	NC	
DP-2	21-22.5	Native	07/18/19	0.0146 U	0.0146 U	0.0146 U	0.0146 U	0.0220 U	0.0220 U	0.0146 U	0.0220 U	0.250 J	1.07 Q-42	0.250 J	0.0220 U	0.0146 U	0.0146 U	0.0146 U	0.0146	0.0146 U	0.0146 U	0.0294 U	0.146 U	0.0146 U	0.0169 J	0.0294 U	0.0294 U	0.0302 J	0.041	0.346	
DP-2	25-26.5	Native	07/18/19	0.00177 U	0.00177 U	0.00177 U	0.00177 U	0.00266 U	0.00266 U	0.00177 U	0.00266 U	0.00887 U	0.0266 U	0.00266 U	0.00177 U	0.00177 U	0.00177 U	0.00177 U	0.00177 U	0.00177 U	0.00177 U	0.00355 U	0.0177 U	0.00177 U	0.00177 U	0.00177 U	0.00355 U	0.00355 U	0.00355 U	NC	NC
DP-3	10-11.5	Native	07/18/19	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	--	--	--	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	0.00538 U	--	0.00538 U	0.00538 U	0.00538 U	0.00538 U	--	NC	NC	
DP-5	10-11.5	Native	07/19/19	0.00533 U	0.00533 U	0.00533 U	0.00841 J	0.00558 J	0.00583 J	0.00533 U	0.00533 U	--	--	--	--	0.00636 J	0.00533 U	0.00533 U	0.00890 J	0.00533 U	0.00533 U	0.00533 U	--	0.00533 U	0.0104 J	0.00533 U	0.00533 U	--	0.0127	0.1148	
DP-10	6-7.5	Native	07/19/19	0.00541	0.00145 U	0.00810	0.0366	0.0695	0.0779 Q-42	0.0701 Q-42	0.0261 M-05	0.0218 U	0.00727 U	0.0218 U	0.00218 U	0.0576 Q-42	0.00669	0.00145 U	0.117 Q-42	0.00145 U	0.0557 Q-42	0.00291 U	0.0145 U	0.0471	0.164 Q-42	0.00291 U	0.00291 U	0.00291 U	0.00291 U	0.094	0.755
DP-11	6-7.5	Fill	07/19/19	0.290	0.0578 U	0.244	1.65	2.87	4.26	2.32	1.35 M-05	0.868 U	0.290 U	0.868 U	0.0887 J	2.30	0.613	0.0578 U	2.86	0.0578 U	2.36	0.116 U	0.598 J	0.967	3.15	0.116 U	0.116 U	0.898	4.35	25.8	
DP-11	10-11.5	Native	07/19/19	0.00141 U	0.00141 U	0.00141 U	0.00291	0.00284 J	0.00301 J	0.00355	0.00212 U	0.02120 U	0.00707 U	0.0212 U	0.00212 U	0.00279 J	0.00141 U	0.00141 U	0.00611	0.00141 U	0.00287	0.00283 U	0.0141 U	0.00407	0.00766	0.00283 U	0.00283 U	0.00283 U	0.00447	0.05488	
DP-12	5-6.5	Fill	07/19/19	0.366 J	0.348 U	0.348 U	2.81	5.59	8.12	6.99	2.63	5.23 U	1.74 U	5.23 U	0.523 U	3.55	1.52	0.348 U	3.05	0.348 U	6.32	0.698 U	3.48 U	0.650 J	4.29	0.698 U	0.698 U	0.698 U	8.93	49.4	
DP-12	10-11.5	Native	07/19/19	0.00447	0.00249	0.00359	0.0155	0.0124	0.0130 M-05	0.00886	0.00477 M-05	0.0207 U	0.00689 U	0.0207 U	0.00207	0.0167	0.00167 J	0.00137 U	0.0274	0.00194 J	0.00859	0.00276 U	0.0137 U	0.0200	0.0375	0.00276 U	0.00276 U	0.00276 U	0.0179	0.1885	
DP-13	5-6.5	Fill	07/19/19	0.324 J	0.173 U	0.355	2.44	6.23	8.23 M-05	6.75	2.70	2.61 U	0.869 U	2.61 U	0.261 U	3.04	1.52	0.173 U	2.49	0.173 U	6.33	0.348 U	2.01 J	0.695	4.02	0.348 U	0.348 U	0.767 J	9.55	46.7	
DP-13	10-11.5	Native	07/19/19	0.00140 U	0.00140 U	0.00140 U	0.00362	0.00264 J	0.00275 J	0.00205 J	0.00210 J	0.0210 U	0.00700 U	0.0210 U	0.00210 U	0.00345	0.00140 U	0.00140 U	0.00467	0.00140 U	0.00200 J	0.00280 U	0.0140 U	0.00254 J	0.00640	0.00280 U	0.00280 U	0.00280 U	0.00411	0.04902	
DP-14	0.5-1.5	Fill	07/16/20	0.106	0.0280 U	0.123	0.624	0.951	1.39	0.976	0.390 M-05	--	--	--	--	0.778	0.225	0.0280 U	0.673	0.0280 U	0.938	0.0280 U	--	0.172	0.815	0.0280 U	0.0280 U	--	1.32	8.33	
DP-14	1.5-2.5	Native	07/16/20	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	--	--	--	--	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	0.00557 U	--	0.00557 U	0.00557 U	0.00557 U	0.00557 U	--	NC	NC	
DP-15	1-2	Fill	07/16/20	0.397	0.110 U	0.719	1.54	2.86	3.86	3.40	0.888 M-05	--	--	--	--	2.16	0.793	0.110 U	1.40	0.110 U	3.13	0.114 J	--	0.426	2.31	0.110 U	0.110 U	--	3.99	24.5	
DP-15	2.5-3.5	Native	07/16/20	0.00499 U	0.00499 U	0.00499 U	0.00789 J	0.00635 J	0.00628 J	0.00519 J	0.00499 U	--	--	--	--	0.00617 J	0.00499 U	0.00499 U	0.00827 J	0.00499 U	0.00510 J	0.00499 U	--	0.00499 U	0.0111	0.00499 U	0.00499 U	--	0.0106	0.1112	
DP-16	6-7	Native	07/16/20	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	--	--	--	--	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	0.00520 U	--	0.00520 U	0.00520 U	0.00520 U	0.00520 U	--	NC	NC	
DP-17	0.5-1.5	Fill	07/16/20	0.00827 J	0.00597 U	0.00895 J	0.0212	0.0340	0.0432	0.0437	0.0163 M-05	--	--	--	--	0.0339	0.00597 U	0.00597 U	0.0629	0.00597 U	0.0378	0.0318	--	0.0279	0.0805	0.00597 U	0.00665 J	--	0.0459	0.4869	
DP-17	2-3	Native	07/16/20	0.00623 U	0.00623 U	0.00623 U	0.00757 J	0.00623 U	0.00623 U	0.00623 U	0.00623 U	--	--	--	--	0.00623 U	0.00623 U	0.00623 U	0.00777 J	0.00623 U	0.00623 U	0.00623 U	--	0.00624 J	0.00997 J	0.00623 U	0.00623 U	--	0.01114	0.12500	
DP-18	2-3	Fill	07/16/20	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	--	--	--	--	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	0.00613 U	--	0.00613 U	0.00613 U	0.00613 U	0.00613 U	--	NC	NC	
DP-19	0.5-1.5	Fill	07/16/20	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	--	--	--	--	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U	--	0.00579 U	0.00579 U	0.00579 U	0.00579 U	--	NC	NC	
DEQ Generic RBCs ¹																															
Soil Ingestion, Dermal Contact, and Inhalation																															
Construction Worker				110,000	21,000	NE	170	17	170	NE	1,700	NE	NE	NE	1,300	NE	17,000	17.0	NE	10,000	14,000	170	580	34	NE	7,500	NE	NE	NE	NE	NE
Excavation Worker				>Max	590,000	NE	4,800	490	4,900	NE	49,000	NE	NE	NE	37,000	NE	490,000	490	NE	280,000	390,000	4,900	16,000	960	NE	210,000	NE	NE	NE	NE	NE
Volatilization to Outdoor Air																															
Occupational				>Max	>Max	NE	>Csat	NV	NV	NE	NV	NE	NE	NV	NE	NV	NV	NE	NV	>Max	NV	83	NV	NE	>Csat	NE	NE	NE	NE	NE	NE
Vapor Intrusion into Buildings																															
Occupational				>Max	>Max	NE	>Csat	NV	NV	NE	NV	NE	NE	NV	NE	NV	NV	NE	NV	>Max	NV	83	NV	NE	>Csat	NE	NE				

TABLE 5 Summary of Soil Sample Chemical Analytical Results PCBs Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon											
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	PCBs EPA Method 8082 (mg/kg)							Total Calculated PCBs (mg/kg)
				PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	
K&S Borings											
B-3 - #3*	7	Native	01/09/19	0.0203 U	0.0203 U	0.0203 U	0.0203 U	0.0203 U	0.0203 U	0.109	0.231
Confirmation Soil Samples - Hydraulic Hoist Remedial Excavation											
C1	12	Unknown	03/08/19	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	NC
C2	12	Unknown	03/08/19	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	NC
C3	9	Unknown	03/08/19	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0339 P-09	0.0993
C7	10	Unknown	03/08/19	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0501 P-10	0.0229 P-10	0.1265
C8	14	Unknown	03/08/19	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0166 P-10	0.0098 U	0.0754
GeoDesign Borings											
DP-1	11-12.5	Native	07/18/19	0.00541 U	0.00541 U	0.00541 U	0.00541 U	0.00541 U	0.00541 U	0.00541 U	NC
DP-2	11-12.5	Native	07/18/19	0.00546 U	0.00546 U	0.00546 U	0.00546 U	0.00546 U	0.00546 U	0.00546 U	NC
DP-2	21-22.5	Native	07/18/19	0.00546 U	0.00546 U	0.00546 U	0.00546 U	0.00546 U	0.00942 J	0.00546 U	0.04218
DP-3	10-11.5	Native	07/18/19	0.00522 U	0.00522 U	0.00522 U	0.00522 U	0.00522 U	0.00522 U	0.00522 U	NC
DP-4	11.5-13	Native	07/19/19	0.00544 U	0.00544 U	0.00544 U	0.00544 U	0.00544 U	0.00544 U	0.00544 U	NC
DP-5	10-11.5	Native	07/19/19	0.00523 U	0.00523 U	0.00523 U	0.00523 U	0.00523 U	0.00523 U	0.00523 U	NC
DP-6	12-13.5	Native	07/19/19	0.00535 U	0.00535 U	0.00535 U	0.00535 U	0.00535 U	0.00535 U	0.00535 U	NC
DP-7	11.5-13	Native	07/19/19	0.00535 U	0.00535 U	0.00535 U	0.00535 U	0.00535 U	0.00535 U	0.00535 U	NC
DP-8	11.5-13	Native	07/19/19	0.00524 U	0.00524 U	0.00524 U	0.00524 U	0.00524 U	0.00524 U	0.00524 U	NC
DP-9	11-12.5	Native	07/19/19	0.00537 U	0.00537 U	0.00537 U	0.00537 U	0.00537 U	0.00537 U	0.00537 U	NC
DP-10	6-7.5	Native	07/19/19	0.00567 U	0.00567 U	0.00567 U	0.00567 U	0.00567 U	0.00567 U	0.00567 U	NC
DP-11	6-7.5	Fill	07/19/19	0.0549 U	0.0549 U	0.0549 U	0.245 P-10	0.0549 U	1.73 P-10	0.505 P-10	2.70
DP-11	10-11.5	Native	07/19/19	0.00204 U	0.00204 U	0.00204 U	0.00204 U	0.00204 U	0.00204 U	0.00204 U	NC
DP-12	5-6.5	Fill	07/19/19	0.270 U	0.270 U	0.270 U	2.27 P-10	0.270 U	9.32 P-10	1.69 P-10	14.36
DP-12	10-11.5	Native	07/19/19	0.00203 U	0.00203 U	0.00203 U	0.00203 U	0.00203 U	0.00203 U	0.00203 U	NC
DP-13	5-6.5	Fill	07/19/19	0.324 U	0.324 U	0.324 U	1.06 P-10	0.324 U	5.05 P-10	0.978 P-10	8.38
DP-13	10-11.5	Native	07/19/19	0.00217 U	0.00217 U	0.00217 U	0.00217 U	0.00217 U	0.00217 U	0.00217 U	NC
DP-14	0.5-1.5	Fill	07/16/20	0.0424 U	0.0424 U	0.0424 U	0.0424 U	0.0424 U	0.830 P-10,Q-39, Q-42	0.261 P-10,Q-39, Q-42	1.30
DP-14	1.5-2.5	Native	07/16/20	0.00215 U	0.00215 U	0.00215 U	0.00215 U	0.00215 U	0.00215 U	0.00215 U	NC
DP-15	1-2	Fill	07/16/20	0.209 U	0.209 U	0.209 U	0.209 U	11.5 P-10	0.209 U	0.938 P-10	13.5
DP-15	2.5-3.5	Native	07/16/20	0.00208 U	0.00208 U	0.00208 U	0.00208 U	0.00208 U	0.00208 U	0.00208 U	NC
DP-16	6-7	Native	07/16/20	0.00207 U	0.00207 U	0.00207 U	0.00207 U	0.00207 U	0.00207 U	0.00207 U	NC
DP-17	0.5-1.5	Fill	07/16/20	0.00230 U	0.00230 U	0.00230 U	0.00230 U	0.00230 U	0.0287	0.00230 U	0.0425
DP-17	2-3	Native	07/16/20	0.00242 U	0.00242 U	0.00242 U	0.00242 U	0.00242 U	0.00242 U	0.00242 U	NC
DP-18	2-3	Fill	07/16/20	0.00246 U	0.00246 U	0.00246 U	0.00246 U	0.00246 U	0.00246 U	0.00246 U	NC
DP-19	0.5-1.5	Fill	07/16/20	0.00230 U	0.00230 U	0.00230 U	0.00230 U	0.00230 U	0.00230 U	0.00230 U	NC
DEQ Generic RBCs ¹											
Soil Ingestion, Dermal Contact, and Inhalation											
Construction Worker			NE							4.9	
Excavation Worker			NE							140	
Volatilization to Outdoor Air											
Occupational			NE							>Csat	
Vapor Intrusion into Buildings											
Occupational			NE							>Csat	
EPA Portland Harbor CULs ²			NE							0.009	
DEQ JSCS SLVs ³				0.530	NE	NE	NE	1.5	0.300	0.200	NE
Notes: 1. DEQ Generic RBCs dated May 2018 2. EPA Record of Decision Portland Harbor Superfund Site Portland, Oregon, dated January 2017; Table 17 Riverbank Soil/Sediment CULs 3. DEQ Portland Harbor Joint Source Control Strategy dated December 2005; Table 3.1 Initial Upland Soil and Stormwater Sediment Evaluation SLVs >Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present. P-10: Result estimated due to the presence of multiple PCB Arochlors and/or matrix interference. Q-39: Results for sample duplicate are significantly higher than the sample results. The duplicate results in QC section of the report. Q-42: Matrix spike and/or duplicate analysis was performed on this sample. Percent recovery or RPD for this analyte is outside the laboratory control limits. U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection. Gray shading indicates analyte detection at a concentration greater than EPA Portland Harbor CULs and/or DEQ JSCS SLVs. Orange shading indicates analyte detection at a concentration greater than DEQ RBCs, EPA Portland Harbor CULs, and DEQ JSCS SLVs.											

TABLE 6 Summary of Soil Sample Chemical Analytical Results Total Metals Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon																	
Boring/Sample I.D.	Sample Depth (feet BGS)	Fill or Native	Sample Date	Total Metals EPA Method 6020A (mg/kg)													
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
DP-1	11-12.5	Native	07/18/19	--	2.48	102	--	0.359	11.0	--	2.50	0.0452 U	--	0.565 U	0.113 U	--	--
DP-2	11-12.5	Native	07/18/19	--	2.56	61.4	--	0.357	9.23	--	2.17	0.0441 U	--	0.552 U	0.110 U	--	--
DP-3	10-11.5	Native	07/18/19	--	2.20	61.4	--	0.297	8.36	--	2.09	0.0639 J	--	0.559 U	0.112 U	--	--
DP-4	11.5-13	Native	07/19/19	--	2.55	59.9	--	0.381	9.53	--	2.41	0.0435 U	--	0.544 U	0.109 U	--	--
DP-5	10-11.5	Native	07/19/19	--	2.39	67.4	--	0.383	10.4	--	2.62	0.0465 U	--	0.581 U	0.116 U	--	--
DP-10	6-7.5	Native	07/19/19	0.619 U	2.12	75.7	0.272	0.362	11.5	14.1	3.42	0.0495 U	17.0	0.619 U	0.124 U	0.124 U	39.3
DP-11	6-7.5	Fill	07/19/19	6.74	51.3	--	0.111 U	1.05	201	2,410	480	14.9	10.3	0.554 U	0.315	0.111 U	1,650
DP-11	10-11.5	Native	07/19/19	0.576 U	1.84	--	0.280	0.115 U	6.49	10.7	1.96	0.0461 U, H-06	12.0	0.576 U	0.115 U	0.115 U	26.3
DP-12	5-6.5	Fill	07/19/19	102	172	--	0.109 U	1.81	212	4,240	1,110	36.0	24.6	0.546 U	0.215 J	0.109 U	2,790
DP-12	10-11.5	Native	07/19/19	0.559 U	2.31	--	0.262	0.112 U	9.15	12.2	2.41	0.0447 U, H-06	15.6	0.559 U	0.112 U	0.112 U	33.3
DP-13	5-6.5	Fill	07/19/19	2.26	55.1	--	0.243 J	0.902	114	2,320	475	19.7	23.0	0.643 U	0.136 J	0.129 U	936
DP-13	10-11.5	Native	07/19/19	0.579 U	1.87	--	0.233	0.116 U	7.70	11.1	2.11	0.0463 U, H-06	13.3	0.579 U	0.116 U	0.12 U	29.3
DP-14	0.5-1.5	Fill	07/16/20	1.76	21.0	117	--	0.985	50.8	878	194	4.94	--	0.613 U	0.133	--	609
DP-14	1.5-2.5	Native	07/16/20	0.588 U	1.91	52.5	--	0.118 U	10.9	11.5	2.17	0.0470 U	--	0.588 U	0.118 U	--	33.3
DP-15	1-2	Fill	07/16/20	7.02	123	120	--	1.06	140	4,420	1,180	26.1	--	0.582 U	0.246	--	1,460
DP-15	2.5-3.5	Native	07/16/20	0.540 U	2.68	61.4	--	0.108 U	11.7	15.0	2.85	0.0561	--	0.540 U	0.108 U	--	39.5
DP-16	6-7	Native	07/16/20	0.527 U	2.63	77.9	--	0.105 U	13.0	14.8	2.52	0.0444 J	--	0.527 U	0.105 U	--	42.1
DP-17	0.5-1.5	Fill	07/16/20	0.618 U	3.37	144	--	0.124 U	25.4	44.1	10.7	0.158 B-02	--	0.618 U	0.124 U	--	65.5
DP-17	2-3	Native	07/16/20	0.627 U	2.99	150	--	0.125 U	23.1	23.8	4.21	0.0650	--	0.627 U	0.125 U	--	53.6
DP-18	2-3	Fill	07/16/20	0.666 U	4.19	151	--	0.133 U	21.9	21.9	4.65	0.0615	--	0.666 U	0.133 U	--	55.9
DP-19	0.5-1.5	Fill	07/16/20	0.592 U	3.09	87.8	--	0.118 U	17.2	20.2	3.48	0.0529 J	--	0.592 U	0.118 U	--	46.3
DEQ Generic RBCs ¹																	
Soil Ingestion, Dermal Contact, and Inhalation																	
Construction Worker				NE	15	69,000	700	350	530,000	14,000	800	110	7,000	NE	1,800	NE	NE
Excavation Worker				NE	420	>Max	19,000	9,700	>Max	390,000	800	2,900	190,000	NE	49,000	NE	NE
Volatilization to Outdoor Air																	
Occupational				NE	NV	NV	NV	NV	NV	NV	NV	NV	NV	NE	NV	NE	NE
Vapor Intrusion into Buildings																	
Occupational				NE	NV	NV	NV	NV	NV	NV	NV	NV	NV	NE	NV	NE	NE
EPA Portland Harbor CULs ²				NE	3	NE	NE	0.51	NE	359	196	0.085	NE	NE	NE	NE	459
DEQ JSCS SLVs ³				64	7	NE	NE	1	111	149	17	0.07	48.6	2	5	NE	459
Background Concentrations				0.56	8.8	790	2	0.63	76	34	28	0.23	47	0.71	0.82	5.2	180

TABLE 6 Summary of Soil Sample Chemical Analytical Results Total Metals Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon
Notes: 1. DEQ Generic RBCs dated May 2018 2. EPA <i>Record of Decision Portland Harbor Superfund Site Portland, Oregon</i>, dated January 2017; Table 17 Riverbank Soil/Sediment CULs 3. DEQ <i>Portland Harbor Joint Source Control Strategy</i> dated December 2005; Table 3.1 Initial Upland Soil and Stormwater Sediment Evaluation SLVs B-02: Analyte detected in an assooiated blank at a level between one-half the MRL and the MRL. J: Estimated result. Result detected below the lowest point of the calibration curve, but above the specified MDL. H-06: This sample was analyzed outside the recommended holding time. >Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario. NV: chemical is considered non-volatile U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection. Gray shading indicates analyte detection at a concentration greater than EPA Portland Harbor CULs and/or DEQ JSCS SLVS. Orange shading indicates analyte detection at a concentration greater than DEQ RBCS, EPA Portland Harbor CULs, and DEQ JSCS SLVS. --: not analyzed

TABLE 7 Summary of Groundwater Sample Chemical Analytical Results Petroleum Hydrocarbons Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon					
Sample I.D.	Sample Date	Screen Interval (feet BGS)	Gasoline-Range Hydrocarbons Method NWTPH-Gx (µg/L)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (µg/L)	
				Diesel-Range	Oil-Range
DP-1W	07/18/19	20 - 30	50.0 U	94.3 U	189 U
DP-2W	07/18/19	20 - 30	50.0 U	94.3 U	189 U
DP-3W	07/18/19	25 - 35	58.8	94.3 U	189 U
DP-14W	07/16/20	24 - 34	50.0 U	96.2 U	192 U
DP-15W	07/16/20	20 - 35	50.0 U	96.2 U	192 U
DP-16W	07/16/20	20 - 30	50.0 U	96.2 U	192 U
DP-16W-DUP	07/16/20	20 - 30	50.0 U	98.0 U	196 U
DP-17W	07/16/20	20 - 35	50.0 U	96.2 U	192 U
DP-18W	07/16/20	19.5 - 34.5	50.0 U	96.2 U	192 U
DP-19W	07/16/20	20 - 35	50.0 U	96.2 U	192 U
DEQ Generic RBCs ¹					
Volatilization to Outdoor Air					
Occupational			>S	>S	>S ²
Vapor Intrusion into Buildings					
Occupational			>S	>S	>S ²
Groundwater in Excavation					
Construction/Excavation Worker			14,000	>S	>S ²
EPA Portland Harbor CULs ³			NE	NE	NE
DEQ JSCS SLVs ⁴			NE	NE	NE
Notes: 1. DEQ Generic RBCs dated May 2018 2. Site-specific RBCs were calculated using TPH Fraction data presented in Table 2. 3. EPA <i>Record of Decision Portland Harbor Superfund Site Portland, Oregon</i> , dated January 2017; Table 17 Groundwater CULs 4. DEQ <i>Portland Harbor Joint Source Control Strategy</i> dated December 2005; Table 3.1 Initial Upland Groundwater Evaluation SLVs >S: This groundwater RBC exceeds the solubility limit. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of S. Groundwater concentrations in excess of S indicate that free product may be present. U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection.					

TABLE 8
Summary Groundwater Sample Chemical Analytical Results
VOCs
Former Automatic Vending Company
5001 North Lagoon Avenue
Portland, Oregon

Sample I.D.	Sample Date	Screen Interval (feet BGS)	VOCs ¹ EPA Methods 8260C and 8260C-SIM (µg/L)						
			cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	MTBE	PCE	TCE	
DP-1W	07/18/19	20 - 30	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.601	0.0100 U	
DP-2W	07/18/19	20 - 30	1.49	0.0181 J	0.0500 U	0.0100 U	10.5	1.86	
DP-3W	07/18/19	25 - 35	0.651	0.0100 U	0.0500 U	0.0100 U	16.6	0.909	
DP-14W	07/16/20	24 - 34	3.18	0.0104 J	0.0818 J	0.0100 U	1.71	2.06	
DP-15W	07/16/20	20 - 35	0.0200 U	0.0100 U	0.0545 J	0.0100 U	0.0465	0.0200 U	
DP-16W	07/16/20	20 - 30	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0100 U	0.0100 U	
DP-16W-DUP	07/16/20	20 - 30	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0100 U	0.0100 U	
DP-17W	07/16/20	20 - 35	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0100 U	0.0100 U	
DP-18W	07/16/20	19.5 - 34.5	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0100 U	0.0100 U	
DP-19W	07/16/20	20 - 35	0.0100 U	0.0100 U	0.0500 U	0.0215	0.0100 U	0.0100 U	
DEQ Generic RBCs²									
Volatilization to Outdoor Air									
Occupational			>S	>S	43,000	1,500,000	>S	20,000	
Vapor Intrusion into Buildings									
Occupational			>S	>S	8,200	870,000	48,000	3,700	
Groundwater in Excavation									
Construction/Excavation Worker			18,000	180,000	4,500	63,000	5,600	430	
EPA Portland Harbor CULs³									
			9.9	NE	7.3	NE	0.24	0.6	
DEQ JSCS SLVs⁴									
			61.0	110	7.3	NE	0.12	0.17	

Notes:

1. Only VOCs detected during current and previous investigations are shown.

2. DEQ Generic RBCs dated May 2018

3. EPA *Record of Decision Portland Harbor Superfund Site Portland, Oregon*, dated January 2017; Table 17 Groundwater CULs

4. DEQ *Portland Harbor Joint Source Control Strategy* dated December 2005; Table 3.1 Initial Upland Groundwater Evaluation SLVs

>S: This groundwater RBC exceeds the solubility limit. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of S. Groundwater concentrations in excess of S indicate that free product may be present.

U: Not detected. Reporting or detection limit shown.

Bolding indicates analyte detection.

Shading indicates analyte detection at a concentration greater than EPA Portland Harbor CULs and/or DEQ JSCS SLVs.

TABLE 9 Summary of Groundwater Sample Chemical Analytical Results SVOCs Former Automatic Vending Company 5001 North Lagoon Avenue Portland, Oregon																												
Sample I.D.	Sample Date	Screen Interval (feet BGS)	SVOCs EPA Method 8270D-SIM (µg/L)																									
			Acenaphthene	Acenaphthylene	Anthracene	Benzyl Alcohol	Di-n-butylphthalate	Bis(2-ethylhexyl)phthalate	Benzoic Acid	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Pentachlorophenol (PCP)	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Phenol	Pyrene
DP-1W	07/18/19	20 - 30	0.00935 U	0.00935 U	0.00935 U	0.524	0.187 U	0.187 U	2.08	0.00935 U	0.0140 U	0.0140 U	0.0140 U	0.00935 U	0.0140 U	0.00935 U	0.00935 U	0.00935 U	0.0935 U	0.00935 U	0.00935 U	0.00935 U	0.0187 U	0.0187 U	0.0187 U	0.00976 J	0.207 J	0.00935 U
DP-2W	07/18/19	20 - 30	0.0374 U	0.0374 U	0.0374 U	9.54	0.748 U	0.748 U	4.67 U	0.0374 U	0.0561 U	0.0561 U	0.0561 U	0.0374 U	0.0561 U	0.0374 U	0.0374 U	0.0374 U	0.374 U	0.0374 U	0.0374 U	0.0374 U	0.0748 U	0.0748 U	0.075 U	0.0374 U	0.748 U	0.0374 U
DP-3W	07/18/19	25 - 35	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.189 U	0.189 U	1.18 U	0.00943 U	0.0142 U	0.0142 U	0.0142 U	0.00943 U	0.0142 U	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.00943 U	0.00943 U	0.00943 U	0.0189 U	0.0189 U	0.0189 U	0.0154 J	0.189 U	0.00943 U
DP-14W	07/16/20	24 - 34	0.00935 U	0.00935 U	0.00935 U	0.094 U	0.245 J	0.187 U	1.17 U	0.00935 U	0.0140 U	0.0140 U	0.0140 U	0.00935 U	0.0140 U	0.00935 U	0.00935 U	0.00935 U	0.0935 U	0.00935 U	0.0125 J	0.00935 U	0.0187 U	0.0187 U	0.0226 J	0.0247	0.187 U	0.00936 J
DP-15W	07/16/20	20 - 35	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.189 U	0.189 U	1.18 U	0.00943 U	0.0142 U	0.0142 U	0.0142 U	0.00943 U	0.0142 U	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.00943 U	0.00943 U	0.00943 U	0.0189 U	0.0189 U	0.0189 U	0.00962 J	0.189 U	0.00943 U
DP-16W	07/16/20	20 - 30	0.00952 U	0.00952 U	0.00952 U	0.0952 U	0.190 U	0.190 U	1.19 U	0.00952 U	0.0143 U	0.0143 U	0.0143 U	0.00952 U	0.0143 U	0.00952 U	0.00952 U	0.00952 U	0.0952 U	0.00952 U	0.00952 U	0.00952 U	0.0190 U	0.0190 U	0.0190 U	0.00952 U	0.190 U	0.00952 U
DP-16W-DUP	07/16/20	20 - 30	0.00962 U	0.00962 U	0.00962 U	0.0962 U	0.192 U	0.192 U	1.20 U	0.00962 U	0.0144 U	0.0144 U	0.0144 U	0.00962 U	0.0144 U	0.00962 U	0.00962 U	0.0110 J	0.0962 U	0.00962 U	0.0192 U	0.00962 U	0.0282 J	0.0379 J	0.0192 U	0.0147 J	0.192 U	0.0175 J
DP-17W	07/16/20	20 - 35	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.189 U	0.189 U	1.18 U	0.00943 U	0.0142 U	0.0142 U	0.0142 U	0.00943 U	0.0142 U	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.00943 U	0.00943 U	0.00943 U	0.0189 U	0.0189 U	0.0189 U	0.0094 U	0.189 U	0.00943 U
DP-18W	07/16/20	19.5 - 34.5	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.189 U	0.189 U	1.18 U	0.00943 U	0.0142 U	0.0142 U	0.0142 U	0.00943 U	0.0142 U	0.00943 U	0.00943 U	0.00943 U	0.0943 U	0.00943 U	0.00943 U	0.00943 U	0.0189 U	0.0189 U	0.0189 U	0.0106 J	0.189 U	0.00943 U
DP-19W	07/16/20	20 - 35	0.0124 J	0.00943 U	0.0239	0.0943 U	0.189 U	0.189 U	1.18 U	0.00943 U	0.0142 U	0.0142 U	0.0142 U	0.00943 U	0.0194 J	0.00943 U	0.00943 U	0.00971 J	0.0943 U	0.0488	0.0124	0.00943 U	0.0189 U	0.0189 U	0.0189 U	0.107	0.189 U	0.0499
DEQ Generic RBCs ¹																												
Volatilization to Outdoor Air																												
Occupational			>S	NE	>S	>S	NE	NV	>S	>S	NV	NV	NV	NE	NE	NV	NV	NE	NE	NV	>S	NV	NE	NE	16,000	NE	NE	>S
Vapor Intrusion into Buildings																												
Occupational			>S	NE	>S	>S	NE	NV	>S	>S	NV	NV	NV	NE	NE	NV	NV	NE	NE	NV	>S	NV	NE	NE	11,000	NE	NE	>S
Groundwater in Excavation																												
Construction/Excavation Worker			>S	NE	>S	>S	NE	>S	>S	>S	>S	>S	>S	NE	NE	>S	>S	NE	NE	>S	>S	>S	NE	NE	500	NE	NE	>S
EPA Portland Harbor CULs ²			23	NE	0.73	NE	NE	NE	NE	0.0012	0.00012	0.0012	0.0013	NE	NE	0.00130	0.00012	NE	0.03	NE	NE	0.0012	NE	NE	NE	NE	NE	NE
DEQ JSCS SLVs ³			0.2	0.2	0.2	8.6	3.0	2.2	42	0.018	0.018	0.018	0.018	0.2	3.4	0.018	0.018	3.7	0.56	0.2	0.2	0.018	2.1	0.2	0.2	0.2	2,560	0.2
Notes: 1. DEQ Generic RBCs dated May 2018 2. EPA Record of Decision Portland Harbor Superfund Site Portland, Oregon, dated January 2017; Table 17 Groundwater CULs 3. DEQ Portland Harbor Joint Source Control Strategy dated December 2005; Table 3.1 Initial Upland Groundwater Evaluation SLVs J: Estimated result. Result detected below the lowest point of the calibration curve, but above the specified MDL. NV: chemical is considered non-volatile >S: This groundwater RBC exceeds the solubility limit. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of S. Groundwater concentrations in excess of S indicate that free product may be present. U: Not detected. Reporting or detection limit shown. Bolding indicates analyte detection. Shading indicates analyte detection at a concentration greater than EPA Portland Harbor CULs and/or DEQ JSCS SLVs. Italics indicates the laboratory reporting limit exceeds DEQ JSCS SLVs.																												

TABLE 10
Summary of Groundwater Sample Chemical Analytical Results
PCBs
Former Automatic Vending Company
5001 North Lagoon Avenue
Portland, Oregon

Sample I.D.	Sample Date	Screen Interval (feet BGS)	PCBs EPA Method 8082 (µg/L)							
			PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	
DP-1W	07/18/19	20 - 30	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	
DP-2W	07/18/19	20 - 30	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	
DP-3W	07/18/19	25 - 35	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	0.0190 U	
DP-14W	07/16/20	24 - 34	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	
DP-15W	07/16/20	20 - 35	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	0.0194 U	
DP-17W	07/16/20	20 - 35	0.0192 U	0.0192 U	0.0192 U	0.0192 U	0.0192 U	0.0192 U	0.0192 U	
DEQ Generic RBCs ¹										
Volatilization to Outdoor Air										
Occupational			>S							
Vapor Intrusion into Buildings										
Occupational			>S							
Groundwater in Excavation										
Construction/Excavation Worker			30							
EPA Portland Harbor CULs ²			0.0000064							
DEQ JSCS SLVs ³			0.0000064							

Notes:

1. DEQ Generic RBCs dated May 2018

2. EPA Record of Decision Portland Harbor Superfund Site Portland, Oregon, dated January 2017; Table 17 Groundwater CULs

3. DEQ Portland Harbor Joint Source Control Strategy dated December 2005; Table 3.1 Initial Upland Groundwater Evaluation SLVs

>S: This groundwater RBC exceeds the solubility limit. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of S. Groundwater concentrations in excess of S indicate that free product may be present.

U: Not detected. Reporting or detection limit shown.

Italics indicates the laboratory reporting limit exceeds DEQ JSCS SLVs.

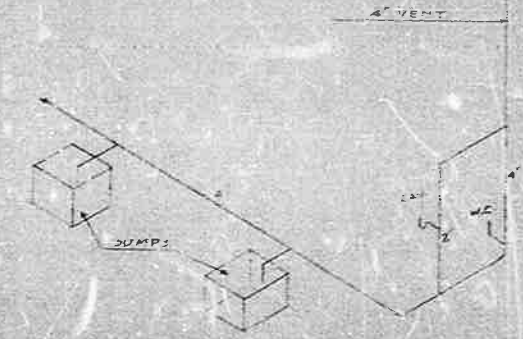
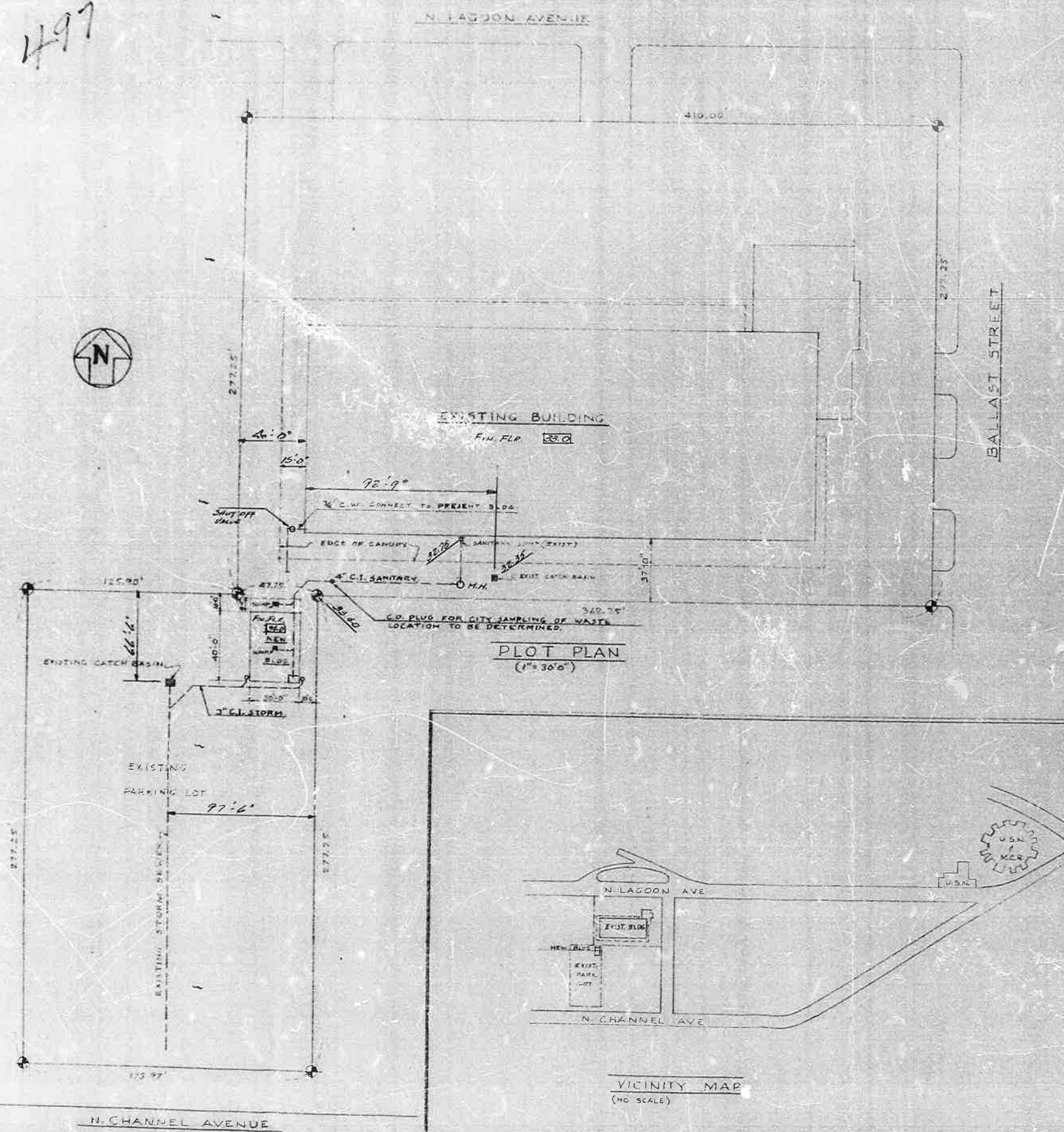
TABLE 11
Summary of Groundwater Sample Chemical Analytical Results
Total and Dissolved Metals
Former Automatic Vending Company
5001 North Lagoon Avenue
Portland, Oregon

Sample I.D.	Sample Date	Screen Interval (feet BGS)	Total Metals EPA Method 6020A (ICP-MS) (µg/L)													Dissolved Metals EPA Method 6020A (ICP-MS) (µg/L)			
			Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	Arsenic	Copper	Mercury	Lead
DP-1W	07/18/19	20 - 30	0.500 U	9.61	0.100 U	0.0577 J	0.713 J	10.2	0.720	0.108	8.35	0.500 U	0.100 U	0.100 U	9.10	9.17	--	--	--
DP-2W	07/18/19	20 - 30	0.500 U	1.19	0.100 U	0.0400 U	0.791 J	1.20	0.237	0.0400 U	2.56	0.500 U	0.100 U	0.100 U	4.03	1.15	--	--	--
DP-3W	07/18/19	25 - 35	0.500 U	0.647 J	0.100 U	0.0400 U	0.500 U	0.500 U	0.100 U	0.0400 U	9.49	0.500 U	0.100 U	0.100 U	2.00 U	0.525 J	0.500 U	--	0.100 U
DP-14W	07/16/20	24 - 34	--	1.33	--	0.100 U	--	5.62	0.584	0.0400 U	--	--	--	--	6.56	1.06	1.00 U	0.0400 U	0.100 U
DP-15W	07/16/20	20 - 35	--	1.42	--	0.100 U	--	1.39	0.100 U	0.0400 U	--	--	--	--	4.49	1.64	1.00 U	0.0400 U	0.100 U
DP-16W	07/16/20	20 - 30	--	0.500 U	--	--	--	1.00 U	0.100 U	--	--	--	--	--	--	0.500 U	1.08 J	--	0.100 U
DP-16W-DUP	07/16/20	20 - 30	--	0.500 U	--	--	--	1.09 J	0.100 U	--	--	--	--	--	--	0.500 U	1.00 U	--	0.100 U
DP-17W	07/16/20	20 - 35	--	0.831 J	--	--	--	1.00 U	0.100 U	0.0400 U	--	--	--	--	--	0.873 J	1.00 U	--	0.100 U
DP-18W	07/16/20	19.5 - 34.5	--	0.500 U	--	0.100 U	--	1.00 U	0.100 U	0.0400 U	--	--	--	--	2.00 U	0.500 U	1.00 U	0.0400 U	0.100 U
DP-19W	07/16/20	20 - 35	--	0.924 J	--	--	--	2.07	0.100 U	--	--	--	--	--	--	1.00	1.00 U	--	0.100 U
DEQ Generic RBCs ¹																			
Volatilization to Outdoor Air																			
Occupational			NE	NV	NV	NV	NV	NV	NV	NV	NV	NE	NV	NE	NE	NV	NV	NV	NV
Vapor Intrusion into Buildings																			
Occupational			NE	NV	NV	NV	NV	NV	NV	NV	NV	NE	NV	NE	NE	NV	NV	NV	NV
Groundwater in Excavation																			
Construction/Excavation Worker			NE	6,300	>S	130,000	>S	5,400,000	>S	>S	>S	NE	1,100,000	NE	NE	6,300	5,400,000	>S	>S
EPA Portland Harbor CULs ²			NE	0.018	NE	0.091	11	2.74	0.54	NE	NE	NE	NE	NE	36.5	0.018	2.74	NE	0.54
DEQ JSCS SLVs ³			6	0.045	NE	0.094	100	2.7	0.54	0.77	16	5	0.12	NE	36	0.045	2.7	0.77	0.54

Notes:
1. DEQ Generic RBCs dated May 2018
2. EPA Record of Decision Portland Harbor Superfund Site Portland, Oregon, dated January 2017; Table 17 Groundwater CULs
3. DEQ Portland Harbor Joint Source Control Strategy dated December 2005; Table 3.1 Initial Upland Groundwater Evaluation SLVs
J: Estimated result. Result detected below the lowest point of the calibration curve, but above the specified MDL
NV: chemical is considered non-volatile
>S: This groundwater RBC exceeds the solubility limit. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of S. Groundwater concentrations in excess of S indicate that free product may be present.
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.
Shading indicates analyte detection at a concentration greater than EPA Portland Harbor CULs and/or DEQ JSCS SLVs.
--: not analyzed

APPENDIX A

1497



GENERAL NOTES

- LOADS & WORKING STRESSES**
- ROOF LIVE LOAD - 25 PSF
 - WIND LOAD - 20 PSF
 - SOIL BEARING - 1500 PSF
 - CONCRETE (f_c) - 2500 PSI
 - STEEL REIN. (f_y) - 20000 PSI
 - STEEL FRAMING (f_y) - 50000 PSI
 - STEEL SHEETING (f_y) - 33000 PSI
 - WOOD BEAMS & POSTS - 1450F NO. 1
 - DECKING STUDS & PLATES - 1100F NO. 2
 - HANDRAIL & POSTS - 1450F NO. 1
- STEEL BUILDING TO BE AS MANUFACTURED BY CUSTOM ROLLED CORRUGATED METALS COMPANY
- ERECTION DETAILS AND STRESS ANALYSIS OF STEEL BUILDING TO BE FURNISHED BY M.E.R.
- ALL WOOD PLATES IN CONTACT WITH CONCRETE TO BE PRESERVED TREATED WITH AN APPROVED PRESERVATIVE.
- WOOD PLATES TO BE SECURED TO CONCRETE WITH 1/2" MACHINE BOLTS USING 2 BOLTS PER PIECE
- WOOD PLATES RESTING ON CONCRETE TO BE SEPARATED THEREFROM BY SHEET METAL OR ASPHALT ROOFING FELT AND HELD IN PLACE BY 1/2" x 1/2" STEEL PINS EXTENDING 3" INTO POST
- TOILET ROOM WALLS TO BE INSULATED WITH 2" THICK FIBERGLASS BLANKET INSULATION
- No increase in employees.
- F-1 occupancy - Truck Service building
- No painting, Motor Repair, or other hazardous work.

ACCEPTABLE
THIS PLAN HAS BEEN
REVIEWED AND MEETS
THE REQUIREMENTS OF
THE PORT OF PORTLAND
EXCEPTIONS ARE NOTED
BY *[Signature]* 2/23/73



TRUCK SERVICE BUILDING FOR CANTEN COMPANY OF OREGON SWAN ISLAND - PORTLAND, OREGON			
LESLIE E. DOOLE - CONSULTING ENGINEER 4606 S.W. 53RD AVENUE - PORTLAND, OREGON			
JOB NO.	DATE	DRAWN BY	SHEET NO.
	1-26-73	P	1

APPENDIX B

Risk-Based Concentrations for TPH: Site-Specific Data

Fuel Fraction	RBCss					RBCso			RBCs			RBCsw			RBCwo			RBCw			RBCat			RBCsg										
	Residential	Urban Residential	Occupational	Construction Worker	Excavation Worker	Residential	Urban Residential	Occupational	Residential	Urban Residential	Occupational	Residential	Urban Residential	Occupational	Residential	Urban Residential	Occupational	Residential	Urban Residential	Occupational	Construction & Excavation Worker	Residential	Urban Residential	Occupational	Residential	Urban Residential	Occupational							
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)							
Aliphatic C5-C6	7.7E-04	8.1E-04	6.2E-04	2.0E-04	8.7E-05	2.0E-02	2.0E-02	4.9E-03	1.4E-01	1.4E-01	1.1E-02	3.8E-03	3.8E-03	9.1E-04	1.5E+03	1.5E+03	6.1E+03	6.5E+04	6.5E+04	2.7E+05	2.9E+03	2.9E+03	3.7E+04	1.7E+05	7.3E+02	7.3E+02	3.1E+03	1.5E+05	1.5E+05	3.1E+08				
Aliphatic >C6-C8	1.1E-03	1.1E-03	8.8E-04	2.8E-04	1.2E-04	2.9E-02	2.9E-02	6.9E-03	3.7E-02	3.7E-02	2.9E-03	6.6E-04	6.6E-04	1.6E-04	1.5E+03	1.5E+03	6.1E+03	4.3E+04	4.3E+04	1.8E+05	1.9E+03	1.9E+03	2.4E+04	1.7E+05	7.3E+02	7.3E+02	3.1E+03	1.5E+05	1.5E+05	3.1E+08				
Aliphatic >C9-C10	1.3E-02	1.4E-02	1.3E-02	1.1E-02	4.8E-03	1.7E-02	1.7E-02	4.1E-03	1.4E-02	1.4E-02	1.1E-03	2.5E-04	2.5E-04	6.1E-05	1.3E+02	1.3E+02	5.5E+02	3.8E+03	3.8E+03	1.6E+04	1.7E+02	1.7E+02	2.2E+03	2.0E+03	1.0E+02	1.0E+02	4.4E+02	2.1E+04	2.1E+04	4.4E+05				
Aliphatic >C10-C12	3.4E-02	3.2E-02	3.0E-02	2.9E-02	1.2E-02	4.4E-03	4.4E-03	1.0E-03	3.6E-03	3.6E-03	2.8E-04	4.2E-05	4.2E-05	1.0E-05	1.3E+02	1.3E+02	5.5E+02	2.8E+03	2.8E+03	1.1E+04	1.1E+02	1.1E+02	1.4E+03	6.7E+02	1.0E+02	1.0E+02	4.4E+02	2.1E+04	2.1E+04	4.4E+05				
Aliphatic >C12-C16	9.0E-02	9.5E-02	1.0E-01	1.1E-01	4.6E-02	9.7E-04	9.7E-04	2.3E-04	8.0E-04	8.0E-04	6.3E-05	7.9E-07	7.9E-07	2.0E-07	3.7E+02	3.7E+02	1.5E+03	5.9E+02	5.9E+02	2.5E+03	2.6E+01	2.6E+01	3.3E+02	1.2E+02	1.0E+02	1.0E+02	4.4E+02	-	-	-				
Aliphatic >C16-C21	3.5E-04	3.7E-04	4.0E-04	4.1E-04	1.8E-04	2.6E-22	2.6E-22	6.2E-23	2.1E-22	2.1E-22	1.7E-23	7.5E-12	7.5E-12	1.9E-12	1.1E+05	1.1E+05	4.4E+05	6.3E+18	6.3E+18	2.6E+19	2.8E+17	2.8E+17	3.5E+18	2.4E+03	1.0E+19	1.0E+19	4.4E+19	-	-	-				
Aliphatic >C21-C34	5.2E-03	5.5E-03	5.9E-03	6.1E-03	2.7E-03	3.2E-25	3.2E-25	7.6E-26	2.6E-25	2.6E-25	2.1E-26	4.5E-16	4.5E-16	1.1E-16	1.1E+05	1.1E+05	4.4E+05	3.1E+17	3.1E+17	1.3E+18	1.4E+16	1.4E+16	1.7E+17	9.0E+02	1.0E+19	1.0E+19	4.4E+19	-	-	-				
Aromatic >C8-C10	3.9E-19	4.1E-19	3.3E-19	1.6E-19	6.5E-20	1.3E-18	1.3E-18	3.0E-19	1.0E-18	1.0E-18	8.2E-20	2.0E-18	2.0E-18	4.9E-19	2.0E+19	2.0E+19	8.3E+19	5.0E+22	5.0E+22	2.1E+23	2.7E+21	2.7E+21	3.4E+22	2.1E+21	1.0E+19	1.0E+19	4.4E+19	-	-	-				
Aromatic >C10-C12	2.5E-01	2.2E-01	1.8E-01	1.6E-01	5.7E-02	6.2E-02	6.2E-02	1.5E-02	5.1E-02	5.1E-02	4.0E-03	3.9E-01	3.9E-01	9.3E-02	1.8E+02	1.8E+02	7.3E+02	1.2E+06	1.2E+06	4.5E+06	8.9E+04	8.9E+04	1.1E+06	1.4E+04	1.0E+02	1.0E+02	4.4E+02	2.1E+04	2.1E+04	4.4E+05				
Aromatic >C12-C16	3.3E-02	3.1E-02	2.9E-02	2.8E-02	1.2E-02	1.1E-03	1.1E-03	2.5E-04	8.7E-04	8.7E-04	6.9E-05	1.8E-02	1.8E-02	4.2E-03	1.8E+02	1.8E+02	7.3E+02	1.9E+06	1.9E+06	7.9E+06	2.3E+05	2.3E+05	2.9E+06	1.2E+04	1.0E+02	1.0E+02	4.4E+02	2.1E+04	2.1E+04	4.4E+05				
Aromatic >C16-C21	1.1E-01	1.1E-01	1.1E-01	1.2E-01	5.2E-02	1.0E-04	1.0E-04	2.4E-05	8.3E-05	8.3E-05	6.6E-06	6.9E-03	6.9E-03	1.6E-03	1.8E+02	1.8E+02	7.3E+02	3.8E+06	3.8E+06	1.6E+07	8.9E+05	8.9E+05	1.1E+07	9.5E+03	1.0E+02	1.0E+02	4.4E+02	2.1E+04	2.1E+04	4.4E+05				
Aromatic >C21-C34	4.6E-01	4.9E-01	5.2E-01	5.4E-01	2.4E-01	1.9E-24	1.9E-24	4.5E-25	1.5E-24	1.5E-24	1.2E-25	2.9E-05	2.9E-05	7.3E-06	1.5E+03	1.5E+03	5.8E+03	4.2E+24	4.2E+24	1.8E+25	1.7E+24	1.7E+24	2.1E+25	7.3E+03	1.0E+19	1.0E+19	4.4E+19	-	-	-				
n-Hexane	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8.8E+02	8.8E+02	3.6E+03	2.1E+05	2.1E+05	9.0E+05	9.5E+03	9.5E+03	1.2E+05	6.5E+04	7.3E+02	7.3E+02	3.1E+03	1.5E+05	1.5E+05	3.1E+08				
Benzene	1.6E-04	1.7E-04	1.6E-04	1.3E-04	5.8E-05	1.7E-03	1.7E-03	4.9E-04	3.6E-03	3.6E-03	2.8E-04	2.3E-02	2.3E-02	5.5E-03	4.4E+01	4.4E+01	1.8E+02	2.8E+05	2.8E+05	1.2E+06	1.9E+04	1.9E+04	2.4E+05	5.7E+03	3.1E+01	3.1E+01	1.3E+02	6.3E+03	6.3E+03	1.3E+05				
Toluene	2.6E-05	2.8E-05	2.8E-05	2.8E-05	1.3E-05	4.0E-05	4.0E-05	9.4E-06	3.2E-05	3.2E-05	2.6E-06	5.6E-04	5.6E-04	1.4E-04	2.3E+03	2.3E+03	9.2E+03	4.4E+07	4.4E+07	1.8E+08	2.7E+06	2.7E+06	3.4E+07	2.1E+05	5.2E+03	5.2E+03	2.2E+04	1.0E+06	1.0E+06	2.2E+07				
Ethylbenzene	1.5E-05	1.5E-05	1.4E-05	1.2E-05	5.5E-06	2.8E-05	2.8E-05	6.7E-06	2.3E-05	2.3E-05	1.8E-06	1.3E-04	1.3E-04	3.2E-05	1.3E+03	1.3E+03	5.5E+03	8.8E+06	8.8E+06	3.7E+07	5.3E+05	5.3E+05	6.6E+06	1.1E+05	1.0E+03	1.0E+03	4.4E+03	2.1E+05	2.1E+05	4.4E+06				
Total Xylenes	1.6E-04	1.7E-04	1.4E-04	5.6E-05	2.4E-05	8.0E-04	8.0E-04	1.9E-04	6.6E-04	6.6E-04	5.2E-05	2.8E-03	2.8E-03	6.7E-04	2.0E+02	2.0E+02	8.5E+02	9.2E+05	9.2E+05	3.9E+06	5.9E+04	5.9E+04	7.4E+05	2.3E+04	1.0E+02	1.0E+02	4.4E+02	2.1E+04	2.1E+04	4.4E+05				
1,2,4-trimethylbenzene	1.4E-03	1.4E-03	1.1E-03	3.5E-04	7.7E-05	1.7E-03	1.7E-03	4.1E-04	1.4E-03	1.4E-03	1.1E-04	7.2E-03	7.2E-03	1.7E-03	1.5E+01	1.5E+01	6.1E+01	8.0E+04	8.0E+04	3.3E+05	5.0E+03	5.0E+03	6.4E+04	1.7E+03	7.3E+00	7.3E+00	3.1E+01	1.5E+03	1.5E+03	3.1E+04				
1,3,5-trimethylbenzene	2.0E-05	2.1E-05	2.1E-05	2.2E-05	9.8E-06	1.4E-22	1.4E-22	3.5E-23	1.2E-22	1.2E-22	9.4E-24	2.5E-05	2.5E-05	6.4E-06	3.7E+02	3.7E+02	1.5E+03	9.2E+22	9.2E+22	3.9E+23	5.4E+21	5.4E+21	6.8E+22	2.3E+04	1.0E+19	1.0E+19	4.4E+19	-	-	-				
Naphthalene	2.2E-03	1.7E-03	1.1E-03	7.4E-04	1.6E-04	2.8E-04	2.8E-04	6.6E-05	2.3E-04	2.3E-04	1.8E-05	1.7E-02	1.7E-02	4.1E-03	6.2E+00	6.2E+00	2.6E+01	1.4E+05	1.4E+05	5.7E+05	2.9E+04	2.9E+04	3.7E+05	7.2E+02	3.1E+00	3.1E+00	1.3E+01	6.3E+02	6.3E+02	1.3E+04				
TPH RBC* ->	2,700	5,700	38,000	12,000	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	200	260	1,100	>S	>S	>S	>S	>S	>S	>S	580	580	2,400	120,000	120,000	2,400,000				
Generic Gasoline	1,200	2,500	20,000	9,700	>MAX	5,900	5,900	69,000	94	94	>MAX	31	31	130	110	110	450	>S	>S	>S	>S	>S	>S	>S	22,000	22,000	>S	14,000	390	390	1,700	79,000	79,000	1,700,000
Generic Diesel / Heating Oil	1,100	2,200	14,000	4,500	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	9,500	9,500	>MAX	100	100	430	>S	>S	>S	>S	>S	>S	>S	>S	>S	>S	>S	100	100	440	21,000	21,000	440,000
Generic Mineral Insulating Oil	2,800	5,700	36,000	11,000	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	>MAX	300	300	1,300	>S	>S	>S	>S	>S	>S	>S	>S	>S	>S	>S	150	150	620	30,000	30,000	620,000

TPH Fraction Composition (Weight Fraction)

Fuel Fractions	Site-Specific Data			Generic Weight Fraction Data		
	Raw Data mg/kg (ppm)	Adjusted Data mg/kg (ppm)	Weight Fraction	Gasoline	Diesel	Mineral Oil
Aliphatic C5-C6	2	2	3.17E-03	2.06E-01	0.00E+00	0.00E+00
Aliphatic >C6-C8	2	2	4.51E-03	2.20E-01	0.00E+00	0.00E+00
Aliphatic >C8-C10	1	1	2.54E-03	9.00E-02	2.00E-02	1.00E-03
Aliphatic >C10-C12	3	3	6.65E-03	3.00E-02	7.00E-02	3.00E-03
Aliphatic >C12-C16	10	10	1.91E-02	0.00E+00	3.50E-01	1.60E-01
Aliphatic >C16-C21	12	12	2.23E-02	0.00E+00	3.40E-01	7.00E-01
Aliphatic >C21-C34	172	172	3.30E-01	0.00E+00	0.00E+00	0.00E+00
Aromatic >C8-C10	10	10	1.90E-02	9.02E-02	2.52E-03	1.00E-03
Aromatic >C10-C12	47	47	8.94E-02	2.25E-02	7.40E-03	1.00E-03
Aromatic >C12-C16	11	11	2.02E-02	0.00E+00	8.00E-02	7.00E-03
Aromatic >C16-C21	46	46	8.87E-02	0.00E+00	1.20E-01	8.00E-02
Aromatic >C21-C34	205	205	3.94E-01	0.00E+00	0.00E+00	4.60E-02
n-Hexane	0.0	0.0	0.00E+00	2.40E-02	0.00E+00	0.00E+00
Benzene	0.0	0.0	1.13E-05	2.50E-02	2.90E-04	0.00E+00
Toluene	0.0	0.0	5.65E-05	1.20E-01	1.80E-03	0.00E+00
Ethylbenzene	0.0	0.0	2.82E-05	2.00E-02	6.80E-04	0.00E+00
Total Xylenes	0.0	0.0	8.72E-05	1.10E-01	5.00E-03	0.00E+00
1,2,4-trimethylbenzene	0.0	0.0	5.65E-05	3.00E-02	0.00E+00	0.00E+00
1,3,5-trimethylbenzene	0.0	0.0	5.65E-06	9.80E-03	1.80E-03	0.00E+00
Naphthalene	0.1	0.1	1.13E-04	2.50E-03	2.60E-03	0.00E+00
Total	521	521	1.00	1.00	1.00	1.00

Use one of the following two options for site-specific TPH RBC calculations.

OPTION 1:		(1) Enter TPH data (mg/kg or ppm) into the cell on the right. →	
Estimate TPH Fractions	(2) Enter BTEX, TMB, and naphthalene data in the "Raw Data" column above.		Gasoline Estimate
	(3) Use one of the buttons at the right to identify the predominant product.		Diesel Estimate
OR			
OPTION 2:		(1) Enter TPH fraction <u>and</u> constituent data in the "Raw Data" column above.	Gasoline Fractions
Use VPH and EPH Results	(2) Use one of the buttons at the right to identify the predominant product.		Non-Gas Fractions

For references, please refer to *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* (DEQ, 2003).

APPENDIX C

APPENDIX C

FIELD PROCEDURES

On July 18 and 19, 2019 GeoDesign advanced 13 direct-push borings (DP-1 through DP-13) to depths of up to 35 feet BGS at the project site. The borings were advanced using equipment owned and operated by Cascade Drilling of Clackamas, Oregon.

On July 16, 2020 six direct-push borings (DP-14 through DP-19) were advanced to a depth of 35 feet BGS at the project site. The borings were advanced using equipment owned and operated by Pacific Soil & Water of Tigard, Oregon.

The locations of the borings are shown on Figures 2 and 3. The exploration logs are presented in this appendix. A GeoDesign field representative observed the drilling activities and collected soil and groundwater samples from the borings. The soil encountered in the borings was visually classified in general accordance with ASTM D2488.

SOIL SAMPLING

Continuous soil samples were collected from the borings. Soil samples collected from the borings were collected from 2-inch-diameter, 60-inch-long samplers lined with acrylic sleeves. Soil samples were collected into laboratory-supplied containers and soil samples for VOC analysis were collected in general accordance with EPA Method 5035A and immediately placed in an ice chest and kept cool until delivery to the laboratory. Standard chain-of-custody procedures were observed during transport of the samples to the laboratory.

SOIL SAMPLING FIELD SCREENING METHODS

A GeoDesign representative performed field screening tests on select soil samples collected from the borings. Field screening results aided in the selection of soil samples for chemical analysis. Screening methods included visual examination, water sheen screening, and headspace vapor screening using a MiniRAE 3000 PID.

Visual screening consisted of inspecting the soil for discoloration indicative of the presence of petroleum contamination in the sample. Water sheen screening involved placing soil in water and observing the water surface for signs of sheen. Sheen classifications are as follows:

No Sheen	No visible sheen on the water surface.
Slight Sheen	Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly. Natural organic matter in the soil may produce a slight sheen.
Moderate Sheen	Light to heavy sheen; may have some color/iridescence; spread is irregular to flowing, may be rapid; few remaining areas of no sheen on water surface.
Heavy Sheen	Heavy sheen with color/iridescence; spread is rapid; entire water surface may be covered with sheen.

Headspace vapor screening is performed by placing a soil sample in a plastic bag. Air is captured in the bag, and the bag is shaken to expose the soil to the air trapped in the bag. The probe of a MiniRAE 3000 PID is inserted into the bag, and the MiniRAE PID measures VOC vapor concentrations in units of ppm. The MiniRAE 3000 PID is calibrated to isobutylene. The MiniRAE PID is designed to quantify VOC vapor concentrations in the range between 10 and 2,000 ppm with an accuracy of 2 percent of the reading and between 2,000 and 10,000 ppm with an accuracy of 20 percent of the reading.

Field screening results are site and exploration specific. The results may vary with temperature, soil moisture content, soil type, and type of contaminant.

GROUNDWATER SAMPLING

Groundwater samples were collected from borings DP-1 through DP-3 and DP-14 through DP-19. A temporary PVC well was installed in each of the boring and was screened as follows:

- DP-1W: 20 to 30 feet BGS
- DP-2W: 20 to 30 feet BGS
- DP-3W: 25 to 35 feet BGS
- DP-14W: 24 to 34 feet BGS
- DP-15W: 20 to 35 feet BGS
- DP-16W: 20 to 35 feet BGS
- DP-17W: 20 to 35 feet BGS
- DP-18W: 19.5 to 34.5 feet BGS
- DP-19W: 20 to 35 feet BGS

Each groundwater sample was collected using a peristaltic pump and dedicated HDPE tubing. Prior to sampling, each well was purged at least 3 casing volumes prior to sampling. Field measurements of turbidity and pH were recorded immediately prior to collecting each groundwater sample.

Groundwater samples collected for analysis of dissolved metals were field-filtered using a new, disposable 0.45-micron filter. Standard chain-of-custody procedures were observed during transport of the samples to the laboratory.

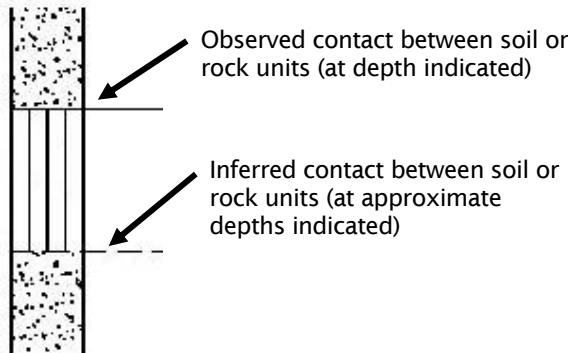
DECONTAMINATION

All sampling equipment used in the collection of samples was decontaminated prior to use. Decontamination was performed on all sample re-usable processing equipment that came into contact with sampling media, including tools, stainless steel implements, trowels, etc. Decontamination was performed prior to sampling each location using the following procedures:

1. Rinsed with tap water and scrubbed with a scrub brush until free of large particles (e.g., sediment or soil)
2. Washed with phosphate-free (Alconox™) detergent solution
3. Rinsed with tap water
4. Rinsed with distilled water

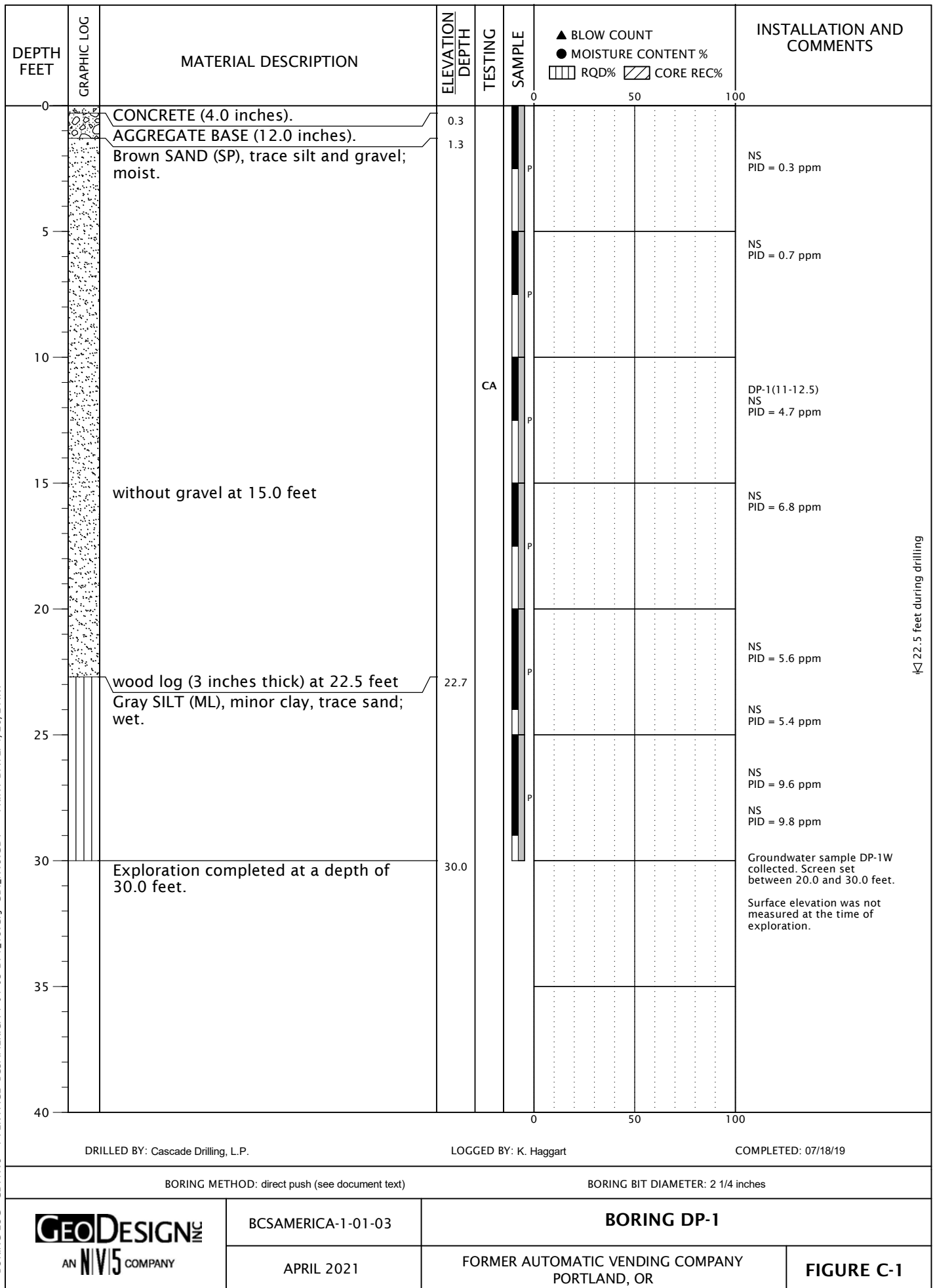
IDW MANAGEMENT

IDW from the borings (soil cuttings, purged groundwater, and decontamination water) was placed into a 55-gallon drum and left on the project site pending disposal.

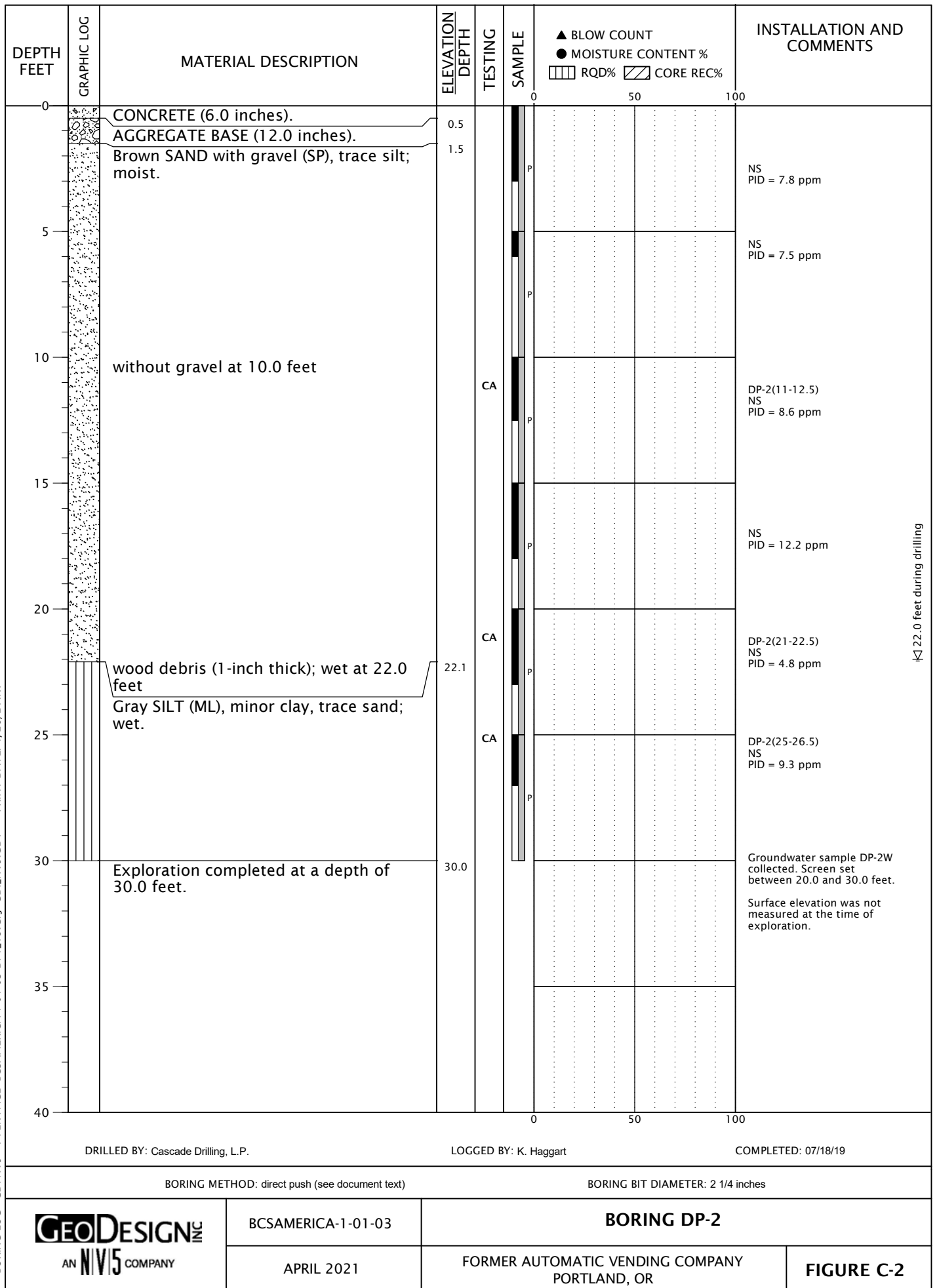
SYMBOL	SAMPLING DESCRIPTION		
	Location of sample collected in general accordance with ASTM D1586 using Standard Penetration Test with recovery		
	Location of sample collected using thin-wall Shelby tube or Geoprobe® sampler in general accordance with ASTM D1587 with recovery		
	Location of sample collected using Dames & Moore sampler and 300-pound hammer or pushed with recovery		
	Location of sample collected using Dames & Moore sampler and 140-pound hammer or pushed with recovery		
	Location of sample collected using 3-inch-O.D. California split-spoon sampler and 140-pound hammer with recovery		
	Location of grab sample		
	Rock coring interval		
	Water level during drilling		
	Water level taken on date shown		
Graphic Log of Soil and Rock Types 			
GEOTECHNICAL TESTING EXPLANATIONS			
ATT	Atterberg Limits	P	Pushed Sample
CBR	California Bearing Ratio	PP	Pocket Penetrometer
CON	Consolidation	P200	Percent Passing U.S. Standard No. 200 Sieve
DD	Dry Density	RES	Resilient Modulus
DS	Direct Shear	SIEV	Sieve Gradation
HYD	Hydrometer Gradation	TOR	Torvane
MC	Moisture Content	UC	Unconfined Compressive Strength
MD	Moisture-Density Relationship	VS	Vane Shear
NP	Non-Plastic	kPa	Kilopascal
OC	Organic Content		
ENVIRONMENTAL TESTING EXPLANATIONS			
CA	Sample Submitted for Chemical Analysis	ND	Not Detected
P	Pushed Sample	NS	No Visible Sheen
PID	Photoionization Detector Headspace Analysis	SS	Slight Sheen
ppm	Parts per Million	MS	Moderate Sheen
		HS	Heavy Sheen
		EXPLORATION KEY	
		TABLE C-1	

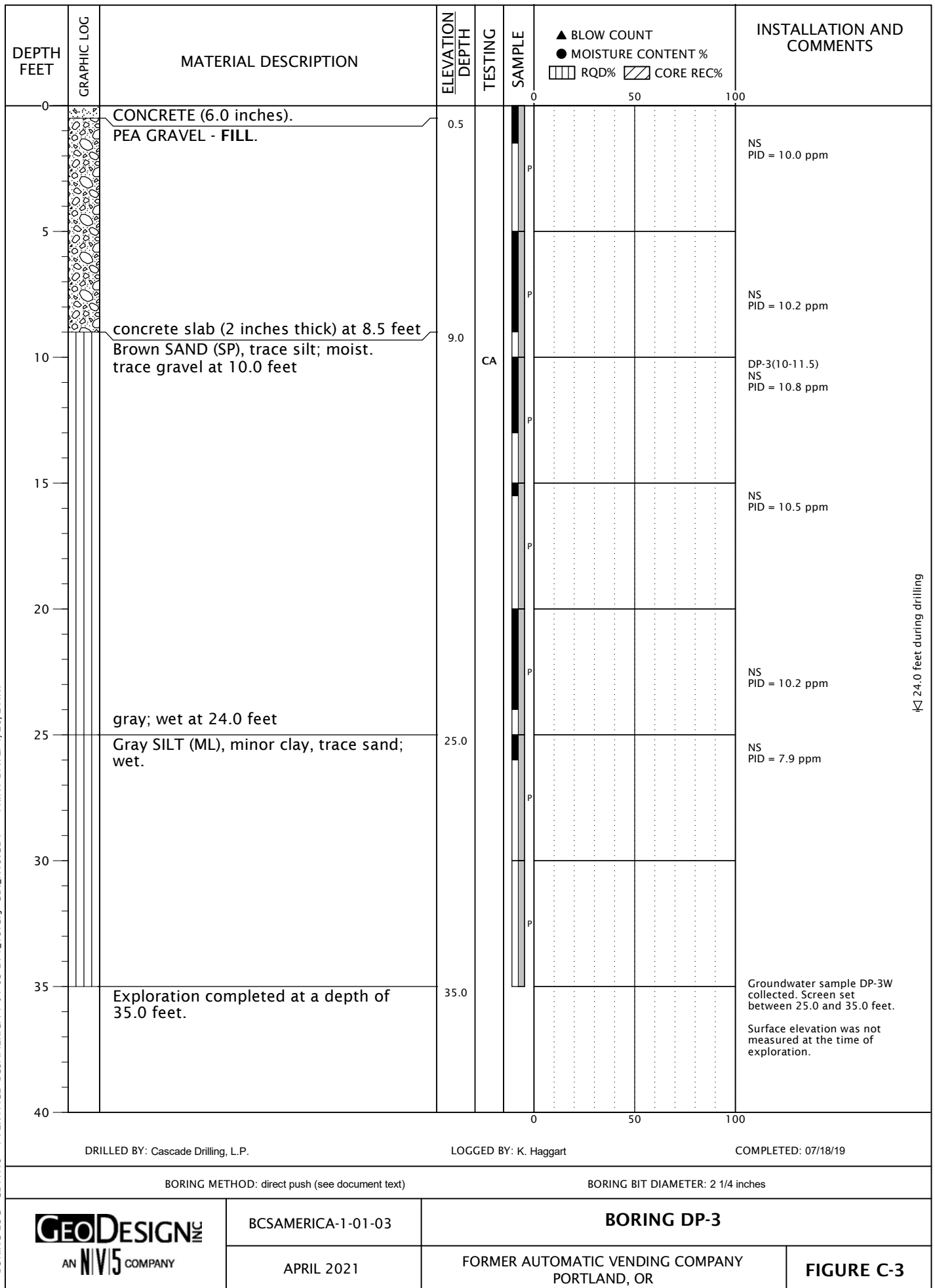
RELATIVE DENSITY - COARSE-GRAINED SOIL										
Relative Density		Standard Penetration Resistance		Dames & Moore Sampler (140-pound hammer)		Dames & Moore Sampler (300-pound hammer)				
Very Loose		0 – 4		0 – 11		0 – 4				
Loose		4 – 10		11 – 26		4 – 10				
Medium Dense		10 – 30		26 – 74		10 – 30				
Dense		30 – 50		74 – 120		30 – 47				
Very Dense		More than 50		More than 120		More than 47				
CONSISTENCY - FINE-GRAINED SOIL										
Consistency		Standard Penetration Resistance		Dames & Moore Sampler (140-pound hammer)		Dames & Moore Sampler (300-pound hammer)		Unconfined Compressive Strength (tsf)		
Very Soft		Less than 2		Less than 3		Less than 2		Less than 0.25		
Soft		2 – 4		3 – 6		2 – 5		0.25 – 0.50		
Medium Stiff		4 – 8		6 – 12		5 – 9		0.50 – 1.0		
Stiff		8 – 15		12 – 25		9 – 19		1.0 – 2.0		
Very Stiff		15 – 30		25 – 65		19 – 31		2.0 – 4.0		
Hard		More than 30		More than 65		More than 31		More than 4.0		
PRIMARY SOIL DIVISIONS				GROUP SYMBOL		GROUP NAME				
COARSE-GRAINED SOIL (more than 50% retained on No. 200 sieve)		GRAVEL (more than 50% of coarse fraction retained on No. 4 sieve)		CLEAN GRAVEL (< 5% fines)		GW or GP		GRAVEL		
				GRAVEL WITH FINES (≥ 5% and ≤ 12% fines)		GW-GM or GP-GM		GRAVEL with silt		
						GW-GC or GP-GC		GRAVEL with clay		
				GRAVEL WITH FINES (> 12% fines)		GM		silty GRAVEL		
						GC		clayey GRAVEL		
						GC-GM		silty, clayey GRAVEL		
		SAND (50% or more of coarse fraction passing No. 4 sieve)		CLEAN SAND (<5% fines)		SW or SP		SAND		
				SAND WITH FINES (≥ 5% and ≤ 12% fines)		SW-SM or SP-SM		SAND with silt		
						SW-SC or SP-SC		SAND with clay		
				SAND WITH FINES (> 12% fines)		SM		silty SAND		
						SC		clayey SAND		
						SC-SM		silty, clayey SAND		
				FINE-GRAINED SOIL (50% or more passing No. 200 sieve)		Liquid limit less than 50		ML		SILT
CL		CLAY								
CL-ML		silty CLAY								
OL		ORGANIC SILT or ORGANIC CLAY								
Liquid limit 50 or greater		MH				SILT				
		CH				CLAY				
		OH				ORGANIC SILT or ORGANIC CLAY				
		PT				PEAT				
HIGHLY ORGANIC SOIL										
MOISTURE CLASSIFICATION			ADDITIONAL CONSTITUENTS							
Term		Field Test		Secondary granular components or other materials such as organics, man-made debris, etc.						
				Silt and Clay In:			Sand and Gravel In:			
				Percent	Fine-Grained Soil	Coarse-Grained Soil	Percent	Fine-Grained Soil	Coarse-Grained Soil	
dry		very low moisture, dry to touch								
moist		damp, without visible moisture		< 5	trace	trace	< 5	trace	trace	
				5 – 12	minor	with	5 – 15	minor	minor	
wet		visible free water, usually saturated		> 12	some	silty/clayey	15 – 30	with	with	
							> 30	sandy/gravelly	Indicate %	
			SOIL CLASSIFICATION SYSTEM						TABLE C-2	

BORING LOG - CDI-NV5 - 1 PER PAGE BCSAMERICA-1-01-03-DP1_19.GPJ CDI-NV5.GDT PRINT DATE: 4/26/21:KT



BORING LOG - CDI-NV5 - 1 PER PAGE BCSAMERICA-1-01-03-DP1_19.GPJ CDI-NV5 GDT PRINT DATE: 4/26/21 KJT





DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		CONCRETE (5.0 inches).	0.4				
		AGGREGATE BASE (6.0 inches).	0.9				NS PID = 2.4 ppm
		Brown SAND (SP), trace silt and gravel; moist.					
5							NS PID = 2.0 ppm NS PID = 2.0 ppm
10				CA			DP-4(11.5-13) NS PID = 2.3 ppm
15							NS PID = 2.7 ppm
		wood debris (1-inch thick) at 16.5 feet					
20		Exploration completed at a depth of 20.0 feet.	20.0				Surface elevation was not measured at the time of exploration.
25							
30							
35							
40							
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
		BCSAMERICA-1-01-03		BORING DP-4			
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-4	

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		CONCRETE (5.0 inches).	0.4			0 50 100	
		AGGREGATE BASE (3.0 inches).	0.7				
		Brown SAND (SP), trace silt and gravel; moist.			P		NS PID = 2.8 ppm
5					P		NS PID = 3.4 ppm
10				CA	P		DP-5(10-11.5) NS PID = 56.2 ppm
15					P		NS PID = 8.3 ppm
		moist to wet at 17.0 feet			P		
20		Exploration completed at a depth of 20.0 feet.	20.0				Surface elevation was not measured at the time of exploration.
25							
30							
35							
40						0 50 100	
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
GEO DESIGN AN NVI5 COMPANY		BCSAMERICA-1-01-03		BORING DP-5			
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-5	

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%			INSTALLATION AND COMMENTS
						0	50	100	
0		CONCRETE (5.0 inches).	0.4						NS PID = 10.2 ppm
		AGGREGATE BASE (4.0 inches).	0.8						
		Brown SAND (SP), trace silt and gravel; moist.							
5									
									NS PID = 6.2 ppm
10									NS PID = 6.5 ppm
				CA					DP-6(12-13.5) NS PID = 6.8 ppm
15									NS PID = 7.8 ppm
									NS PID = 7.6 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0						Surface elevation was not measured at the time of exploration.
25									
30									
35									
40									
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19					
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches					
		BCSAMERICA-1-01-03		BORING DP-6					
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR				FIGURE C-6	

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		CONCRETE (4.0 inches). AGGREGATE BASE (6.0 inches). Brown SAND (SP), trace silt and gravel; moist.	0.3 0.8			0 50 100	
5					P		NS PID = 6.1 ppm
10					P		NS PID = 6.7 ppm
15				CA	P		DP-7(11.5-13) NS PID = 4.4 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0		P		NS PID = 5.3 ppm
25							Surface elevation was not measured at the time of exploration.
30							
35							
40						0 50 100	
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
		BCSAMERICA-1-01-03		BORING DP-7			
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-7	

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		CONCRETE (4.0 inches).	0.3				
		AGGREGATE BASE (3.0 inches).	0.6				
		Brown SAND (SP), trace silt and gravel; moist.					NS PID = 6.6 ppm
5							
							NS PID = 9.7 ppm
10				CA			
							DP-8(11.5-13) NS PID = 10.7 ppm
15							
							NS PID = 4.5 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0				Surface elevation was not measured at the time of exploration.
25							
30							
35							
40							
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
		BCSAMERICA-1-01-03		BORING DP-8			
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-8	

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	BLOW COUNT		MOISTURE CONTENT %		RQD% CORE REC%		INSTALLATION AND COMMENTS
						▲	●					
0		CONCRETE (4.0 inches).	0.3									NS PID = 3.8 ppm
		AGGREGATE BASE (6.0 inches).	0.8									
		Brown SAND (SP), trace silt and gravel; moist.										
5												NS PID = 7.1 ppm
10				CA								DP-9(11-12.5) NS PID = 4.8 ppm
15												NS PID = 3.8 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0									Surface elevation was not measured at the time of exploration.
25												
30												
35												
40												
DRILLED BY: Cascade Drilling, L.P.												
LOGGED BY: K. Haggart												
COMPLETED: 07/19/19												
BORING METHOD: direct push (see document text)												
BORING BIT DIAMETER: 2 1/4 inches												
		BCSAMERICA-1-01-03		BORING DP-9								
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR								
				FIGURE C-9								

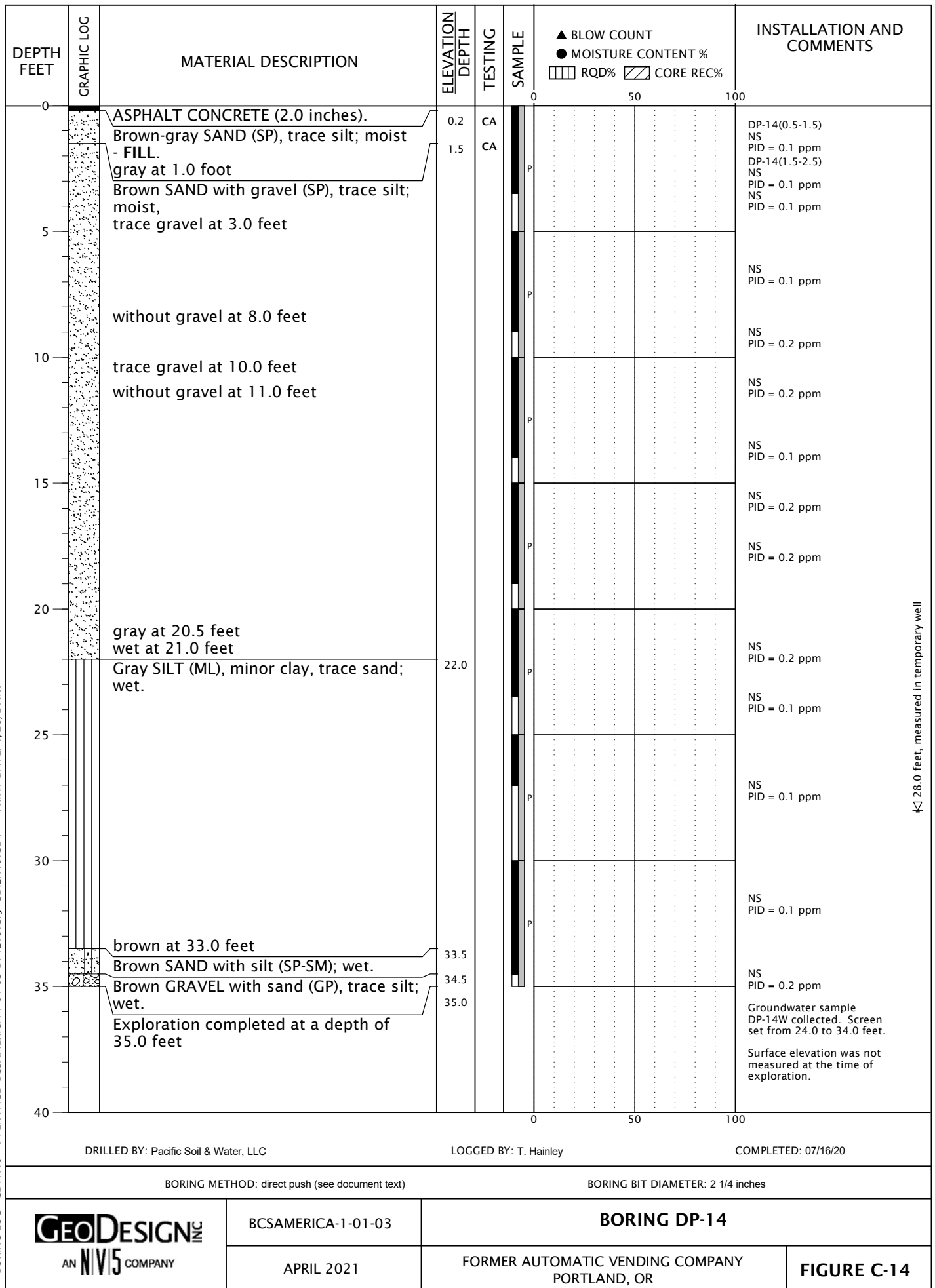
DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		CONCRETE (5.0 inches). AGGREGATE BASE (3.0 inches). Brown SAND (SP), trace silt and gravel; moist.	0.4 0.7			0 50 100	
5					P		NS PID = 6.7 ppm
10					P		DP-10(6-7.5) NS PID = 11.5 ppm
15		without gravel at 15.0 feet		CA	P		NS PID = 5.7 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0		P		NS PID = 6.4 ppm NS PID = 5.3 ppm
25							Surface elevation was not measured at the time of exploration.
30							
35							
40						0 50 100	
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
		BCSAMERICA-1-01-03		BORING DP-10			
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-10	

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		CONCRETE (6.0 inches).				050100	
0.5		AGGREGATE BASE (3.0 inches).	0.5				NS PID = 3.2 ppm
0.8		Brown-gray SAND (SP), trace silt; moist - FILL.	0.8		P		
5				CA	P		DP-11(6-7.5) NS PID = 4.3 ppm
10		concrete slab at 8.5 feet					
10		Brown SAND (SP), trace silt and gravel; moist.	10.0	CA	P		DP-11(10-11.5) NS PID = 5.1 ppm
15		without gravel at 15.0 feet			P		NS PID = 4.1 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0				Surface elevation was not measured at the time of exploration.
25							
30							
35							
40							
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
GEO DESIGN AN NV5 COMPANY		BCSAMERICA-1-01-03		BORING DP-11			
APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-11			

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		ASPHALT CONCRETE (3.0 inches). Brown-gray SAND (SP), trace silt; moist - FILL	0.3			0 50 100	NS PID = 8.0 ppm
5		black-orange at 5.0 feet		CA	P		DP-12(5-6.5) NS PID = 7.7 ppm
10		concrete slab (2 inches thick) at 7.5 feet Brown SAND (SP), trace silt and gravel; moist.	7.7		P		DP-12(10-11.5) NS PID = 5.5 ppm
15				CA	P		NS PID = 2.9 ppm
20		Exploration completed at a depth of 20.0 feet.	20.0				Surface elevation was not measured at the time of exploration.
25							
30							
35							
40						0 50 100	
DRILLED BY: Cascade Drilling, L.P.		LOGGED BY: K. Haggart		COMPLETED: 07/19/19			
BORING METHOD: direct push (see document text)				BORING BIT DIAMETER: 2 1/4 inches			
		BCSAMERICA-1-01-03		BORING DP-12			
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-12	

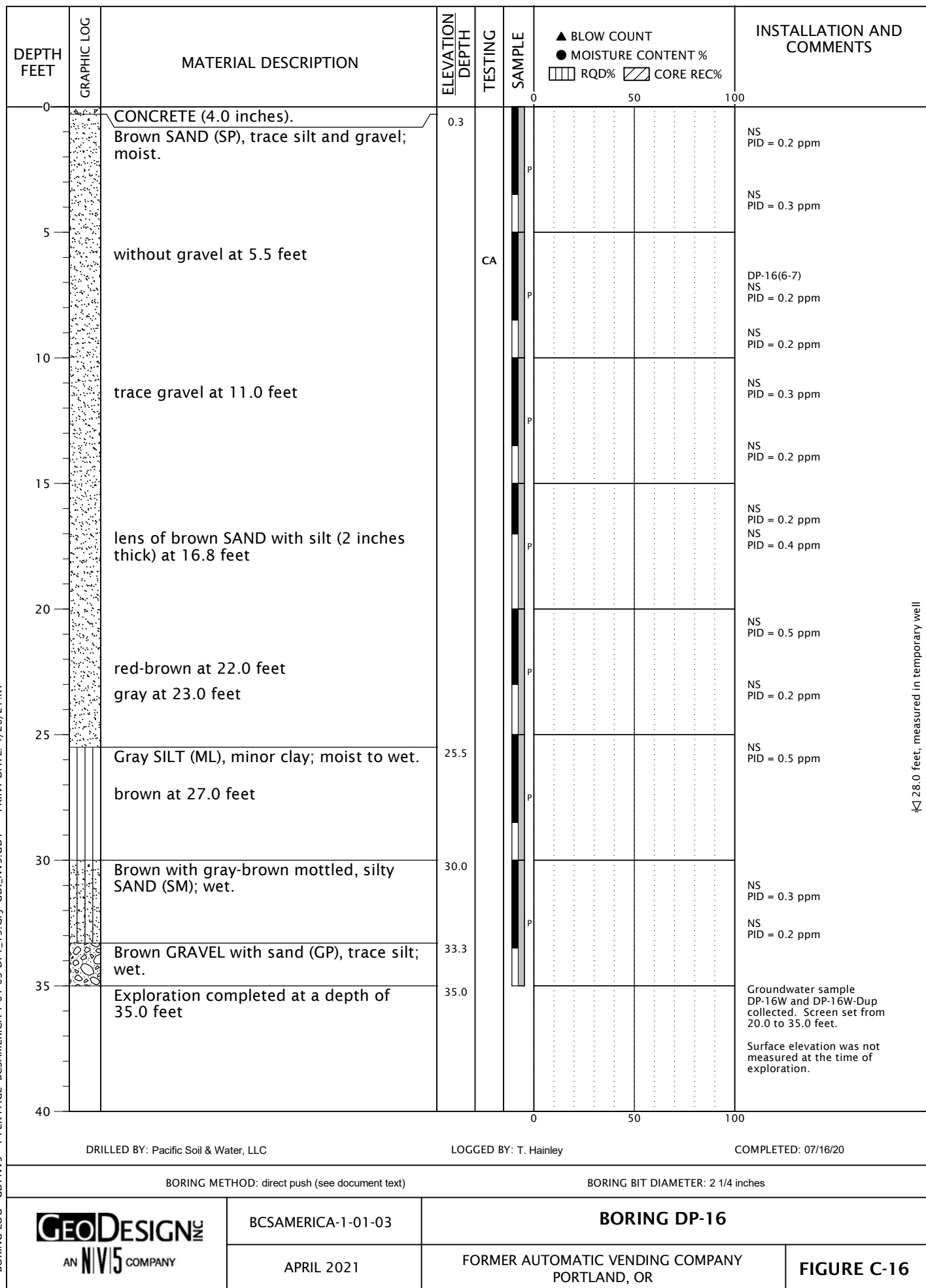
DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%		INSTALLATION AND COMMENTS
0						0	50	100
0.3		ASPHALT CONCRETE (3.0 inches). Brown-orange SAND (SP), trace silt; moist - FILL.	0.3		P			NS PID = 4.2 ppm
5				CA	P			DP-13(5-6.5) NS PID = 3.3 ppm
7.7		concrete slab (2 inches thick) at 7.5 feet Brown SAND (SP), trace silt and gravel; moist.	7.7		P			
10				CA	P			DP-13(10-11.5) NS PID = 4.2 ppm
15		Exploration completed at a depth of 15.0 feet.	15.0					Surface elevation was not measured at the time of exploration.
20								
25								
30								
35								
40								
0 50 100								
DRILLED BY: Cascade Drilling, L.P. LOGGED BY: K. Haggart COMPLETED: 07/19/19								
BORING METHOD: direct push (see document text) BORING BIT DIAMETER: 2 1/4 inches								
GEO DESIGN AN NV5 COMPANY		BCSAMERICA-1-01-03		BORING DP-13				
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR				FIGURE C-13

BORING LOG - CDI-NV5 - 1 PER PAGE BCSAMERICA-1-01-03-DP1_19.GPJ CDI-NV5 GDT PRINT DATE: 4/26/21:KT



DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		ASPHALT CONCRETE (2.0 inches).	0.2	CA			NS PID = 0.2 ppm DP-15(1-2)
		Red-brown SAND (SP), trace silt; moist - FILL.	1.8				NS PID = 0.2 ppm DP-15(2.5-3.5)
		White and yellow SAND (SP); moist - FILL.	2.3	CA	P		NS PID = 0.3 ppm
5		Brown SAND (SP), trace silt and gravel; moist.					NS PID = 0.2 ppm
					P		NS PID = 0.3 ppm
10					P		NS PID = 0.3 ppm
					P		NS PID = 0.2 ppm
15					P		NS PID = 0.3 ppm
					P		NS PID = 0.3 ppm
20		debris (wood, 2 inches thick) at 19.0 feet					NS PID = 0.2 ppm NS PID = 0.3 ppm
					P		NS PID = 0.2 ppm NS PID = 0.3 ppm
25		Gray SILT (ML), minor clay, trace sand; wet. moist at 22.5 feet	22.0				NS PID = 0.2 ppm
		wet at 25.0 feet			P		NS PID = 0.2 ppm
		moist at 26.0 feet			P		NS PID = 0.1 ppm
		sandy at 28.0 feet			P		NS PID = 0.2 ppm
30		Brown SAND (SP), trace silt and gravel; wet.	30.0				NS PID = 0.3 ppm
					P		Groundwater sample DP-15W collected. Screen set from 20.0 to 35.0 feet.
35		Exploration completed at a depth of 35.0 feet	35.0				Surface elevation was not measured at the time of exploration.
40							
DRILLED BY: Pacific Soil & Water, LLC LOGGED BY: T. Hainley COMPLETED: 07/16/20							
BORING METHOD: direct push (see document text) BORING BIT DIAMETER: 2 1/4 inches							
		BCSAMERICA-1-01-03	BORING DP-15				
AN NVIS COMPANY		APRIL 2021	FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR			FIGURE C-15	

21.6 feet, measured in temporary well



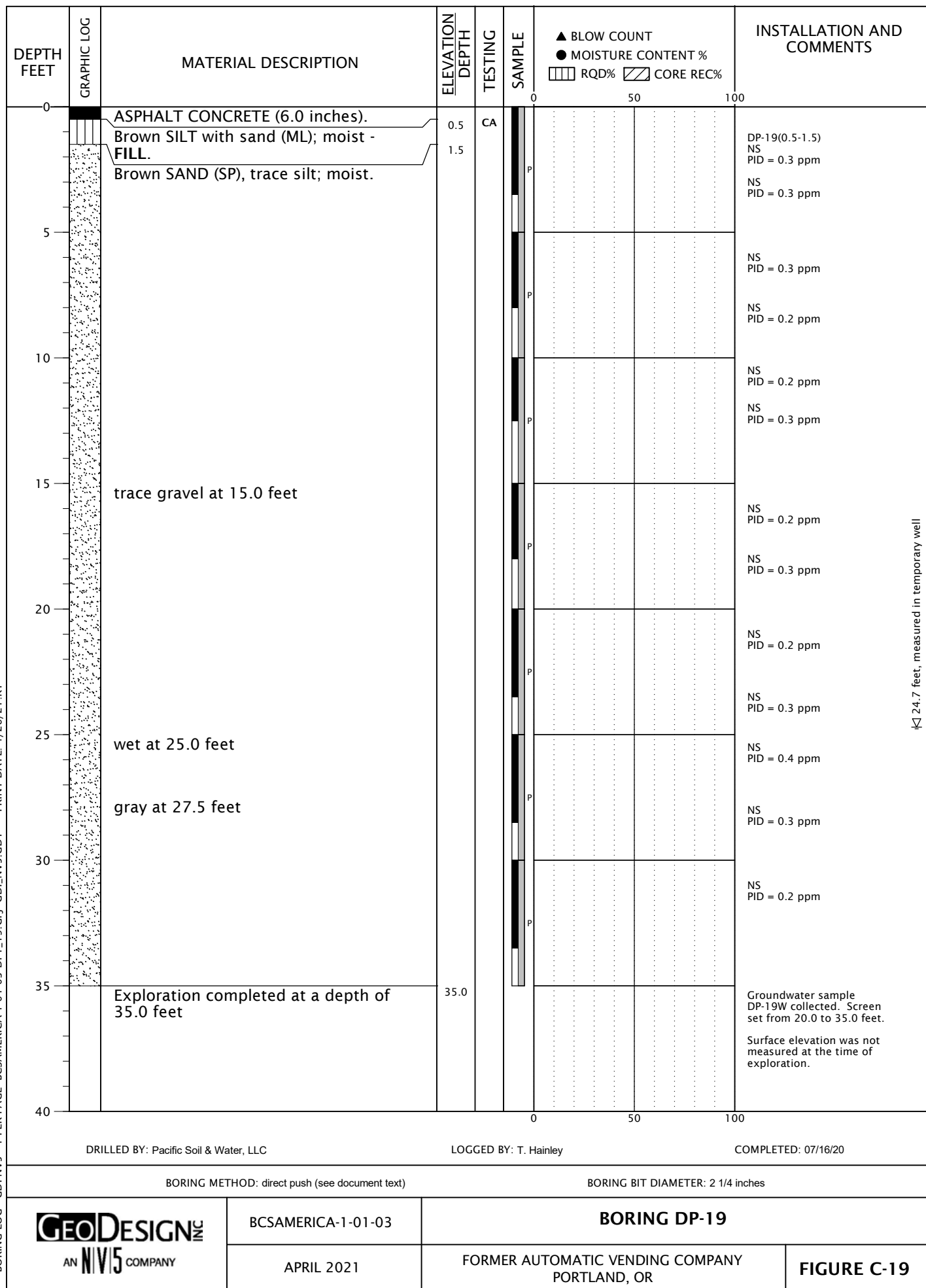
DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%			INSTALLATION AND COMMENTS
						0	50	100	
0		ASPHALT CONCRETE (2.0 inches).	0.2	CA					DP-17(0.5-1.5) SS PID = 0.2 ppm NS PID = 0.3 ppm DP-17(2-3) NS
		Gray-brown SAND (SP), trace silt; moist - FILL.	2.0	CA	P				
		Brown SAND with silt (SP-SM); moist.	3.0						
		Brown SAND (SP), trace silt and gravel; moist.							
5									NS PID = 0.4 ppm
					P				NS PID = 0.2 ppm
10									NS PID = 0.2 ppm
					P				NS PID = 0.3 ppm
15									NS PID = 0.2 ppm
					P				NS PID = 0.2 ppm
20				CA					DP-17(21-22) NS PID = 0.2 ppm
		red-brown at 22.0 feet	23.0		P				NS PID = 0.3 ppm
		Gray SILT (ML), minor clay, trace sand; moist to wet.							NS PID = 0.3 ppm
25					P				NS PID = 0.3 ppm
									NS PID = 0.3 ppm
30		gray with brown mottles at 30.0 feet							NS PID = 0.3 ppm
					P				NS PID = 0.2 ppm
35		Brown SAND (SP), trace silt; wet.	34.0						Groundwater sample DP-17W collected. Screen set from 20.0 to 35.0 feet.
		Exploration completed at a depth of 35.0 feet	35.0						Surface elevation was not measured at the time of exploration.
40									
DRILLED BY: Pacific Soil & Water, LLC						LOGGED BY: T. Hainley		COMPLETED: 07/16/20	
BORING METHOD: direct push (see document text)						BORING BIT DIAMETER: 2 1/4 inches			
		BCSAMERICA-1-01-03		BORING DP-17					
		APRIL 2021		FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR		FIGURE C-17			

22.3 feet, measured in temporary well

BORING LOG - CDI-NV5 - 1 PER PAGE BCSAMERICA-1-01-03-DP1-19-GPJ CDI-NV5 GDT PRINT DATE: 4/26/21:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%	INSTALLATION AND COMMENTS
0		ASPHALT CONCRETE (6.0 inches).					
0.5		Brown SAND (SP), trace silt; moist - FILL.	0.5	CA	P		NS PID = 0.3 ppm
2.8		Gray GRAVEL (GP), trace sand; moist - FILL.	2.8				DP-18(2-3) NS PID = 0.2 ppm
3.0		Brown SAND (SP), trace silt and gravel; moist.	3.0				
5					P		NS PID = 0.4 ppm NS PID = 0.2 ppm
10					P		NS PID = 0.3 ppm NS PID = 0.3 ppm
15					P		NS PID = 0.2 ppm
20					P		NS PID = 0.2 ppm NS PID = 0.3 ppm
25					P		NS PID = 0.3 ppm
26.5		wet at 26.5 feet			P		NS PID = 0.2 ppm
29.0		gray at 29.0 feet			P		NS PID = 0.2 ppm
30.0		Gray SAND with silt (SP-SM); wet.	30.0		P		NS PID = 0.2 ppm
31.5		Gray SAND with gravel (SP), trace silt; wet.	31.5		P		NS PID = 0.3 ppm
35.0		Exploration completed at a depth of 35.0 feet	35.0				Groundwater sample DP-18W collected. Screen set from 19.5 to 34.5 feet. Surface elevation was not measured at the time of exploration.
40							
DRILLED BY: Pacific Soil & Water, LLC LOGGED BY: T. Hainley COMPLETED: 07/16/20							
BORING METHOD: direct push (see document text) BORING BIT DIAMETER: 2 1/4 inches							
		BCSAMERICA-1-01-03	BORING DP-18				
AN NVIS COMPANY		APRIL 2021	FORMER AUTOMATIC VENDING COMPANY PORTLAND, OR				FIGURE C-18

26.7 feet, measured in temporary well



APPENDIX D

APPENDIX D

CHEMICAL ANALYTICAL PROGRAM

GENERAL

Chain-of-custody procedures were followed during handling and transport of the soil and groundwater samples to the analytical laboratory. The laboratory holds the samples in cold storage pending extraction and/or analysis. The analytical results, analytical methods reference, and laboratory QC records are presented in this appendix. The analytical results also are summarized in the tables of this report.

REVIEW OF ANALYTICAL DATA

The analytical laboratories maintain an internal QA program consisting of a combination of the following:

Blanks: Blanks are laboratory-prepared samples that are free of contaminants. The blanks are carried through the analysis procedure along with the field samples to document that contaminants were not introduced to the samples during sample handling and analysis.

Surrogate Recoveries: Surrogates are organic compounds that are similar in nature to the analytes of concern but are not normally found in nature. The surrogates are added to QC and field samples prior to analysis. The percent recovery of the surrogate is calculated to demonstrate acceptable method performance.

Duplicates: Duplicates are obtained by splitting a sample into two parts. The two separate parts are carried through the analyses. The analytical results are then compared by calculating the RPD between the samples.

MS/MSD Recoveries: An MS sample is a sample that has been split into a second portion. The MSD is obtained by further splitting the MS sample. A known concentration of the analyte of interest is added to the MS and MSD samples. The analytical results for both samples are then compared for RPD and percent recovery to demonstrate acceptable method performance.

BS/BSD Recoveries: BS and BSD samples are obtained and analyzed in the same procedure as the MS/MSD samples; however, the laboratory blank sample is used to obtain the BS/BSD samples. The percent recovery and RPD of the known concentration of analyte of interest added to the BS/BSD sample is calculated after chemical analyses to demonstrate acceptable method performance.

SUMMARY OF ANALYTICAL DATA REVIEW

GeoDesign reviewed the attached analytical data report for data quality exceptions and deviations from acceptable method performance criteria. Based on our review of the analytical reports, the analytical data appear acceptable for their intended use. Any deviations, non-conformities, or anomalies are discussed in Section 10.0.



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

Tuesday, August 18, 2020

Kyle Haggart
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A0G0466 - Former Automatic Vending Co. - BCSAmerica-1-01-03

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 A0G0466, which was received by the laboratory on 7/17/2020 at 1:15:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@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	2.6 degC	Cooler #2	1.3 degC
Cooler #3	5.5 degC	Cooler #4	3.3 degC
Cooler #5	5.9 degC	Cooler #6	6.3 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

Philip Nerenberg, Lab Director

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL REPORT FOR SAMPLES**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-14(0.5-1.5)	A0G0466-01	Soil	07/16/20 07:30	07/17/20 13:15
DP-14(1.5-2.5)	A0G0466-02	Soil	07/16/20 07:35	07/17/20 13:15
DP-14(8-9)	A0G0466-03	Soil	07/16/20 07:45	07/17/20 13:15
DP-14(12-13)	A0G0466-04	Soil	07/16/20 07:55	07/17/20 13:15
DP-14(17-18)	A0G0466-05	Soil	07/16/20 08:00	07/17/20 13:15
DP-14(21-22)	A0G0466-06	Soil	07/16/20 08:10	07/17/20 13:15
DP-15(1-2)	A0G0466-07	Soil	07/16/20 09:15	07/17/20 13:15
DP-15(2.5-3.5)	A0G0466-08	Soil	07/16/20 09:20	07/17/20 13:15
DP-15(7-8)	A0G0466-09	Soil	07/16/20 09:25	07/17/20 13:15
DP-15(10-11)	A0G0466-10	Soil	07/16/20 09:35	07/17/20 13:15
DP-15(21-22)	A0G0466-11	Soil	07/16/20 09:45	07/17/20 13:15
DP-16(3-4)	A0G0466-12	Soil	07/16/20 11:25	07/17/20 13:15
DP-16(6-7)	A0G0466-13	Soil	07/16/20 11:35	07/17/20 13:15
DP-16(12.5-13.5)	A0G0466-14	Soil	07/16/20 11:40	07/17/20 13:15
DP-16(16-17)	A0G0466-15	Soil	07/16/20 11:50	07/17/20 13:15
DP-16(25-26)	A0G0466-17	Soil	07/16/20 12:00	07/17/20 13:15
DP-17(0.5-1.5)	A0G0466-18	Soil	07/16/20 12:50	07/17/20 13:15
DP-17(2-3)	A0G0466-19	Soil	07/16/20 12:55	07/17/20 13:15
DP-17(5-6)	A0G0466-20	Soil	07/16/20 13:05	07/17/20 13:15
DP-17(12-13)	A0G0466-21	Soil	07/16/20 13:10	07/17/20 13:15
DP-17(16-17)	A0G0466-22	Soil	07/16/20 13:25	07/17/20 13:15
DP-17(21-22)	A0G0466-23	Soil	07/16/20 13:55	07/17/20 13:15
DP-18(2-3)	A0G0466-24	Soil	07/16/20 16:10	07/17/20 13:15
DP-18(6-7)	A0G0466-25	Soil	07/16/20 16:15	07/17/20 13:15
DP-18(10-11)	A0G0466-26	Soil	07/16/20 16:20	07/17/20 13:15
DP-18(15-16)	A0G0466-27	Soil	07/16/20 16:25	07/17/20 13:15
DP-18(23-24)	A0G0466-28	Soil	07/16/20 16:30	07/17/20 13:15
DP-18(25-26)	A0G0466-29	Soil	07/16/20 16:35	07/17/20 13:15
DP-19(0.5-1.5)	A0G0466-30	Soil	07/16/20 17:00	07/17/20 13:15
DP-19(5-6)	A0G0466-31	Soil	07/16/20 17:05	07/17/20 13:15
DP-19(11-12)	A0G0466-32	Soil	07/16/20 17:10	07/17/20 13:15
DP-19(17-18)	A0G0466-33	Soil	07/16/20 17:20	07/17/20 13:15
DP-19(22.5-23.5)	A0G0466-34	Soil	07/16/20 17:25	07/17/20 13:15

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL REPORT FOR SAMPLES**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Blank-1	A0G0466-35	Water	07/16/20 00:00	07/17/20 13:15
Blank-2	A0G0466-36	Water	07/16/20 00:00	07/17/20 13:15
Blank-3	A0G0466-37	Water	07/16/20 00:00	07/17/20 13:15
Blank-4	A0G0466-38	Water	07/16/20 00:00	07/17/20 13:15
Blank-5	A0G0466-39	Water	07/16/20 00:00	07/17/20 13:15
Blank-6	A0G0466-40	Water	07/16/20 00:00	07/17/20 13:15
DP-14W	A0G0466-41	Water	07/16/20 10:20	07/17/20 13:15
DP-15W	A0G0466-42	Water	07/16/20 15:15	07/17/20 13:15
DP-16W	A0G0466-43	Water	07/16/20 13:20	07/17/20 13:15
DP-16W-DUP	A0G0466-44	Water	07/16/20 13:40	07/17/20 13:15
DP-17W	A0G0466-45	Water	07/16/20 17:55	07/17/20 13:15
DP-18W	A0G0466-46	Water	07/16/20 18:35	07/17/20 13:15
DP-19W	A0G0466-47	Water	07/16/20 19:00	07/17/20 13:15
DP-15(18-19)	A0G0466-48	Soil	07/16/20 09:40	07/17/20 13:15

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Philip Nerenberg, Lab Director

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070663		
Diesel	ND	10.6	25.0	mg/kg dry	1	07/22/20 23:41	NWTPH-Dx	F-03
Oil	427	21.1	50.0	mg/kg dry	1	07/22/20 23:41	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 85 %		Limits: 50-150 %	1	07/22/20 23:41	NWTPH-Dx	
DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070663		
Diesel	ND	10.8	25.0	mg/kg dry	1	07/23/20 00:21	NWTPH-Dx	
Oil	ND	43.0	50.0	mg/kg dry	1	07/23/20 00:21	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %	1	07/23/20 00:21	NWTPH-Dx	
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070663		
Diesel	ND	225	450	mg/kg dry	20	07/23/20 00:42	NWTPH-Dx	S-01
Oil	1940	450	901	mg/kg dry	20	07/23/20 00:42	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: %		Limits: 50-150 %	20	07/23/20 00:42	NWTPH-Dx	
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070663		
Diesel	ND	10.1	25.0	mg/kg dry	1	07/23/20 01:22	NWTPH-Dx	
Oil	ND	40.5	50.0	mg/kg dry	1	07/23/20 01:22	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/23/20 01:22	NWTPH-Dx	
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070663		
Diesel	ND	10.2	25.0	mg/kg dry	1	07/23/20 01:42	NWTPH-Dx	
Oil	ND	40.7	50.0	mg/kg dry	1	07/23/20 01:42	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %	1	07/23/20 01:42	NWTPH-Dx	
DP-17(0.5-1.5) (A0G0466-18)				Matrix: Soil		Batch: 0070663		
Diesel	ND	11.8	25.0	mg/kg dry	1	07/23/20 02:02	NWTPH-Dx	J
Oil	47.1	23.7	50.0	mg/kg dry	1	07/23/20 02:02	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %	1	07/23/20 02:02	NWTPH-Dx	
DP-17(2-3) (A0G0466-19)				Matrix: Soil		Batch: 0070663		
Diesel	ND	12.1	25.0	mg/kg dry	1	07/23/20 02:22	NWTPH-Dx	J
Oil	30.1	24.3	50.0	mg/kg dry	1	07/23/20 02:22	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %	1	07/23/20 02:22	NWTPH-Dx	

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070663		
Diesel	ND	12.2	25.0	mg/kg dry	1	07/23/20 02:42	NWTPH-Dx	
Oil	29.0	24.4	50.0	mg/kg dry	1	07/23/20 02:42	NWTPH-Dx	J
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/23/20 02:42	NWTPH-Dx	
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070663		
Diesel	ND	11.5	25.0	mg/kg dry	1	07/22/20 22:00	NWTPH-Dx	
Oil	ND	23.0	50.0	mg/kg dry	1	07/22/20 22:00	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 94 %		Limits: 50-150 %	1	07/22/20 22:00	NWTPH-Dx	
DP-14W (A0G0466-41)				Matrix: Water		Batch: 0070652		
Diesel	ND	0.0962	0.192	mg/L	1	07/23/20 00:09	NWTPH-Dx	
Oil	ND	0.192	0.385	mg/L	1	07/23/20 00:09	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %	1	07/23/20 00:09	NWTPH-Dx	
DP-15W (A0G0466-42)				Matrix: Water		Batch: 0070652		
Diesel	ND	0.0962	0.192	mg/L	1	07/23/20 03:57	NWTPH-Dx	
Oil	ND	0.192	0.385	mg/L	1	07/23/20 03:57	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %	1	07/23/20 03:57	NWTPH-Dx	
DP-16W (A0G0466-43)				Matrix: Water		Batch: 0070652		
Diesel	ND	0.0962	0.192	mg/L	1	07/23/20 04:20	NWTPH-Dx	
Oil	ND	0.192	0.385	mg/L	1	07/23/20 04:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/23/20 04:20	NWTPH-Dx	
DP-16W-DUP (A0G0466-44)				Matrix: Water		Batch: 0070652		
Diesel	ND	0.0980	0.196	mg/L	1	07/23/20 04:42	NWTPH-Dx	
Oil	ND	0.196	0.392	mg/L	1	07/23/20 04:42	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 90 %		Limits: 50-150 %	1	07/23/20 04:42	NWTPH-Dx	
DP-17W (A0G0466-45)				Matrix: Water		Batch: 0070652		
Diesel	ND	0.0962	0.192	mg/L	1	07/23/20 05:06	NWTPH-Dx	
Oil	ND	0.192	0.385	mg/L	1	07/23/20 05:06	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %	1	07/23/20 05:06	NWTPH-Dx	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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
DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070652			
Diesel	ND	0.0962	0.192	mg/L	1	07/23/20 05:28	NWTPH-Dx	
Oil	ND	0.192	0.385	mg/L	1	07/23/20 05:28	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/23/20 05:28</i>	<i>NWTPH-Dx</i>	
DP-19W (A0G0466-47)		Matrix: Water			Batch: 0070652			
Diesel	ND	0.0962	0.192	mg/L	1	07/23/20 05:51	NWTPH-Dx	
Oil	ND	0.192	0.385	mg/L	1	07/23/20 05:51	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/23/20 05:51</i>	<i>NWTPH-Dx</i>	

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Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

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
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070556		
Gasoline Range Organics	ND	2.90	5.81	mg/kg dry	50	07/20/20 18:51	NWTPH-Gx (MS)	Q-42
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 90 %	Limits: 50-150 %	1	07/20/20 18:51	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		103 %	50-150 %	1	07/20/20 18:51	NWTPH-Gx (MS)		
DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070556		
Gasoline Range Organics	ND	2.93	5.86	mg/kg dry	50	07/20/20 19:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 91 %	Limits: 50-150 %	1	07/20/20 19:45	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		104 %	50-150 %	1	07/20/20 19:45	NWTPH-Gx (MS)		
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070556		
Gasoline Range Organics	8.48	2.94	5.88	mg/kg dry	50	07/20/20 20:12	NWTPH-Gx (MS)	F-13
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 93 %	Limits: 50-150 %	1	07/20/20 20:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		104 %	50-150 %	1	07/20/20 20:12	NWTPH-Gx (MS)		
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070556		
Gasoline Range Organics	ND	2.50	5.00	mg/kg dry	50	07/20/20 20:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 87 %	Limits: 50-150 %	1	07/20/20 20:39	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	07/20/20 20:39	NWTPH-Gx (MS)		
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070574		
Gasoline Range Organics	ND	2.96	5.91	mg/kg dry	50	07/20/20 23:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 100 %	Limits: 50-150 %	1	07/20/20 23:40	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		109 %	50-150 %	1	07/20/20 23:40	NWTPH-Gx (MS)		
DP-17(0.5-1.5) (A0G0466-18)				Matrix: Soil		Batch: 0070574		
Gasoline Range Organics	ND	3.20	6.40	mg/kg dry	50	07/21/20 00:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 103 %	Limits: 50-150 %	1	07/21/20 00:34	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		109 %	50-150 %	1	07/21/20 00:34	NWTPH-Gx (MS)		
DP-17(2-3) (A0G0466-19)				Matrix: Soil		Batch: 0070574		
Gasoline Range Organics	ND	3.13	6.26	mg/kg dry	50	07/21/20 01:28	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 101 %	Limits: 50-150 %	1	07/21/20 01:28	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		108 %	50-150 %	1	07/21/20 01:28	NWTPH-Gx (MS)		
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070574		

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Project: Former Automatic Vending Co.

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Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

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
DP-18(2-3) (A0G0466-24)		Matrix: Soil			Batch: 0070574			
Gasoline Range Organics	ND	3.25	6.51	mg/kg dry	50	07/21/20 01:55	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 106 %	Limits: 50-150 %	1	07/21/20 01:55	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		110 %	50-150 %	1	07/21/20 01:55	NWTPH-Gx (MS)		
DP-19(0.5-1.5) (A0G0466-30)		Matrix: Soil			Batch: 0070607			
Gasoline Range Organics	ND	3.18	6.37	mg/kg dry	50	07/21/20 14:50	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 106 %	Limits: 50-150 %	1	07/21/20 14:50	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		100 %	50-150 %	1	07/21/20 14:50	NWTPH-Gx (MS)		
DP-14W (A0G0466-41)		Matrix: Water			Batch: 0070681			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 08:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 96 %	Limits: 50-150 %	1	07/23/20 08:41	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		103 %	50-150 %	1	07/23/20 08:41	NWTPH-Gx (MS)		
DP-15W (A0G0466-42)		Matrix: Water			Batch: 0070681			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 07:47	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	07/23/20 07:47	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	07/23/20 07:47	NWTPH-Gx (MS)		
DP-16W (A0G0466-43)		Matrix: Water			Batch: 0070681			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 08:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	07/23/20 08:14	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		106 %	50-150 %	1	07/23/20 08:14	NWTPH-Gx (MS)		
DP-16W-DUP (A0G0466-44)		Matrix: Water			Batch: 0070692			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 16:22	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 96 %	Limits: 50-150 %	1	07/23/20 16:22	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		104 %	50-150 %	1	07/23/20 16:22	NWTPH-Gx (MS)		
DP-17W (A0G0466-45)		Matrix: Water			Batch: 0070692			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 17:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 96 %	Limits: 50-150 %	1	07/23/20 17:17	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	07/23/20 17:17	NWTPH-Gx (MS)		
DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070692			

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Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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
DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070692			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 17:44	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	07/23/20 17:44	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		105 %	50-150 %	1	07/23/20 17:44	NWTPH-Gx (MS)		
DP-19W (A0G0466-47)		Matrix: Water			Batch: 0070692			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/23/20 18:11	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 97 %	Limits: 50-150 %	1	07/23/20 18:11	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		104 %	50-150 %	1	07/23/20 18:11	NWTPH-Gx (MS)		

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Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070556		
Acetone	ND	581	1160	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Acrylonitrile	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Benzene	ND	5.81	11.6	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Bromobenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Bromochloromethane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Bromodichloromethane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Bromoform	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Bromomethane	ND	581	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
2-Butanone (MEK)	ND	290	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
n-Butylbenzene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
sec-Butylbenzene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
tert-Butylbenzene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Carbon disulfide	ND	290	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Carbon tetrachloride	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Chlorobenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Chloroethane	ND	290	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Chloroform	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Chloromethane	ND	145	290	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
2-Chlorotoluene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
4-Chlorotoluene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Dibromochloromethane	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	145	290	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Dibromomethane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2-Dichlorobenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,3-Dichlorobenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,4-Dichlorobenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Dichlorodifluoromethane	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1-Dichloroethane	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1-Dichloroethene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
cis-1,2-Dichloroethene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
trans-1,2-Dichloroethene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070556		
1,2-Dichloropropane	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,3-Dichloropropane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
2,2-Dichloropropane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1-Dichloropropene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
cis-1,3-Dichloropropene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
trans-1,3-Dichloropropene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Ethylbenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Hexachlorobutadiene	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
2-Hexanone	ND	290	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Isopropylbenzene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
4-Isopropyltoluene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Methylene chloride	ND	290	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
4-Methyl-2-pentanone (MIBK)	ND	290	581	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Naphthalene	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
n-Propylbenzene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Styrene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Tetrachloroethene (PCE)	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Toluene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2,3-Trichlorobenzene	ND	145	290	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2,4-Trichlorobenzene	ND	145	290	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1,1-Trichloroethane	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,1,2-Trichloroethane	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Trichloroethene (TCE)	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Trichlorofluoromethane	ND	58.1	116	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2,3-Trichloropropane	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,2,4-Trimethylbenzene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
1,3,5-Trimethylbenzene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
Vinyl chloride	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
m,p-Xylene	ND	29.0	58.1	ug/kg dry	50	07/20/20 18:51	5035A/8260D	
o-Xylene	ND	14.5	29.0	ug/kg dry	50	07/20/20 18:51	5035A/8260D	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070556		
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %	Limits: 80-120 %	1	07/20/20 18:51	5035A/8260D		
Toluene-d8 (Surr)		100 %	80-120 %	1	07/20/20 18:51	5035A/8260D		
4-Bromofluorobenzene (Surr)		97 %	79-120 %	1	07/20/20 18:51	5035A/8260D		
DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070556		
Acetone	ND	586	1170	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Acrylonitrile	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Benzene	ND	5.86	11.7	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Bromobenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Bromochloromethane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Bromodichloromethane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Bromoform	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Bromomethane	ND	586	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
2-Butanone (MEK)	ND	293	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
n-Butylbenzene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
sec-Butylbenzene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
tert-Butylbenzene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Carbon disulfide	ND	293	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Carbon tetrachloride	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Chlorobenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Chloroethane	ND	293	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Chloroform	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Chloromethane	ND	146	293	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
2-Chlorotoluene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
4-Chlorotoluene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Dibromochloromethane	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	146	293	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Dibromomethane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2-Dichlorobenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,3-Dichlorobenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,4-Dichlorobenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Dichlorodifluoromethane	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1-Dichloroethane	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070556		
1,2-Dichloroethane (EDC)	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1-Dichloroethene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
cis-1,2-Dichloroethene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
trans-1,2-Dichloroethene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2-Dichloropropane	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,3-Dichloropropane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
2,2-Dichloropropane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1-Dichloropropene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
cis-1,3-Dichloropropene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
trans-1,3-Dichloropropene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Ethylbenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Hexachlorobutadiene	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
2-Hexanone	ND	293	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Isopropylbenzene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
4-Isopropyltoluene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Methylene chloride	ND	293	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
4-Methyl-2-pentanone (MIBK)	ND	293	586	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Naphthalene	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
n-Propylbenzene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Styrene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Tetrachloroethene (PCE)	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Toluene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2,3-Trichlorobenzene	ND	146	293	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2,4-Trichlorobenzene	ND	146	293	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1,1-Trichloroethane	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,1,2-Trichloroethane	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Trichloroethene (TCE)	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Trichlorofluoromethane	ND	58.6	117	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2,3-Trichloropropane	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
1,2,4-Trimethylbenzene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(1.5-2.5) (A0G0466-02)		Matrix: Soil			Batch: 0070556			
1,3,5-Trimethylbenzene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
Vinyl chloride	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
m,p-Xylene	ND	29.3	58.6	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
o-Xylene	ND	14.6	29.3	ug/kg dry	50	07/20/20 19:45	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/20/20 19:45</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/20/20 19:45</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>79-120 %</i>	<i>1</i>	<i>07/20/20 19:45</i>	<i>5035A/8260D</i>	
DP-15(1-2) (A0G0466-07)		Matrix: Soil			Batch: 0070556			
Acetone	ND	588	1180	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Acrylonitrile	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Benzene	ND	5.88	11.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Bromobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Bromochloromethane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Bromodichloromethane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Bromoform	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Bromomethane	ND	588	588	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
2-Butanone (MEK)	ND	294	588	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
n-Butylbenzene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
sec-Butylbenzene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
tert-Butylbenzene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Carbon disulfide	ND	294	588	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Carbon tetrachloride	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Chlorobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Chloroethane	ND	294	588	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Chloroform	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Chloromethane	ND	147	294	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
2-Chlorotoluene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
4-Chlorotoluene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Dibromochloromethane	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	147	294	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Dibromomethane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2-Dichlorobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	

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Philip Nerenberg, Lab Director



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Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070556		
1,3-Dichlorobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,4-Dichlorobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Dichlorodifluoromethane	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1-Dichloroethane	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1-Dichloroethene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
cis-1,2-Dichloroethene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
trans-1,2-Dichloroethene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2-Dichloropropane	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,3-Dichloropropane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
2,2-Dichloropropane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1-Dichloropropene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
cis-1,3-Dichloropropene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
trans-1,3-Dichloropropene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Ethylbenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Hexachlorobutadiene	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
2-Hexanone	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Isopropylbenzene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
4-Isopropyltoluene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Methylene chloride	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Naphthalene	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
n-Propylbenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Styrene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Tetrachloroethene (PCE)	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Toluene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2,3-Trichlorobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2,4-Trichlorobenzene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1,1-Trichloroethane	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,1,2-Trichloroethane	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070556		
Trichloroethene (TCE)	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Trichlorofluoromethane	ND	58.8	118	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2,3-Trichloropropane	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,2,4-Trimethylbenzene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
1,3,5-Trimethylbenzene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Vinyl chloride	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
m,p-Xylene	ND	29.4	58.8	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
o-Xylene	ND	14.7	29.4	ug/kg dry	50	07/20/20 20:12	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %	1	07/20/20 20:12	5035A/8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	07/20/20 20:12	5035A/8260D	
4-Bromofluorobenzene (Surr)		96 %		79-120 %	1	07/20/20 20:12	5035A/8260D	
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070556		
Acetone	ND	500	1000	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Acrylonitrile	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Benzene	ND	5.00	10.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Bromobenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Bromochloromethane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Bromodichloromethane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Bromoform	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Bromomethane	ND	500	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
2-Butanone (MEK)	ND	250	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
n-Butylbenzene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
sec-Butylbenzene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
tert-Butylbenzene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Carbon disulfide	ND	250	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Carbon tetrachloride	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Chlorobenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Chloroethane	ND	250	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Chloroform	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Chloromethane	ND	125	250	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
2-Chlorotoluene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
4-Chlorotoluene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Dibromochloromethane	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	

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Project Manager: **Kyle Haggart**

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ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070556		
1,2-Dibromo-3-chloropropane	ND	125	250	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Dibromomethane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Dichlorodifluoromethane	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1-Dichloroethane	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1-Dichloroethene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
cis-1,2-Dichloroethene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2-Dichloropropane	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,3-Dichloropropane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
2,2-Dichloropropane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1-Dichloropropene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Ethylbenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Hexachlorobutadiene	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
2-Hexanone	ND	250	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Isopropylbenzene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
4-Isopropyltoluene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Methylene chloride	ND	250	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Naphthalene	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
n-Propylbenzene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Styrene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Toluene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	

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Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070556		
1,2,3-Trichlorobenzene	ND	125	250	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2,4-Trichlorobenzene	ND	125	250	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Trichloroethene (TCE)	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Trichlorofluoromethane	ND	50.0	100	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Vinyl chloride	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
m,p-Xylene	ND	25.0	50.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
o-Xylene	ND	12.5	25.0	ug/kg dry	50	07/20/20 20:39	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %	1	07/20/20 20:39	5035A/8260D	
Toluene-d8 (Surr)		103 %		80-120 %	1	07/20/20 20:39	5035A/8260D	
4-Bromofluorobenzene (Surr)		96 %		79-120 %	1	07/20/20 20:39	5035A/8260D	
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070574		
Acetone	ND	591	1180	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Acrylonitrile	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Benzene	ND	5.91	11.8	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Bromobenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Bromochloromethane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Bromodichloromethane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Bromoform	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Bromomethane	ND	591	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
2-Butanone (MEK)	ND	296	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
n-Butylbenzene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
sec-Butylbenzene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
tert-Butylbenzene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Carbon disulfide	ND	296	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Carbon tetrachloride	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Chlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Chloroethane	ND	296	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Chloroform	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070574		
Chloromethane	ND	148	296	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
2-Chlorotoluene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
4-Chlorotoluene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Dibromochloromethane	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	148	296	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Dibromomethane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2-Dichlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,3-Dichlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,4-Dichlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Dichlorodifluoromethane	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,1-Dichloroethane	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,1-Dichloroethene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
cis-1,2-Dichloroethene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
trans-1,2-Dichloroethene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2-Dichloropropane	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,3-Dichloropropane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
2,2-Dichloropropane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,1-Dichloropropene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
cis-1,3-Dichloropropene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
trans-1,3-Dichloropropene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Ethylbenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Hexachlorobutadiene	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
2-Hexanone	ND	296	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Isopropylbenzene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
4-Isopropyltoluene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Methylene chloride	ND	296	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
4-Methyl-2-pentanone (MIBK)	ND	296	591	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Naphthalene	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
n-Propylbenzene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Styrene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070574		
1,1,1,2-Tetrachloroethane	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Tetrachloroethene (PCE)	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Toluene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2,3-Trichlorobenzene	ND	148	296	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2,4-Trichlorobenzene	ND	148	296	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,1,1-Trichloroethane	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,1,2-Trichloroethane	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Trichloroethene (TCE)	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Trichlorofluoromethane	ND	59.1	118	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2,3-Trichloropropane	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,2,4-Trimethylbenzene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
1,3,5-Trimethylbenzene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Vinyl chloride	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
m,p-Xylene	ND	29.6	59.1	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
o-Xylene	ND	14.8	29.6	ug/kg dry	50	07/20/20 23:40	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %	1	07/20/20 23:40	5035A/8260D	
Toluene-d8 (Surr)		102 %		80-120 %	1	07/20/20 23:40	5035A/8260D	
4-Bromofluorobenzene (Surr)		104 %		79-120 %	1	07/20/20 23:40	5035A/8260D	
DP-17(0.5-1.5) (A0G0466-18)				Matrix: Soil		Batch: 0070574		
Acetone	ND	640	1280	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Acrylonitrile	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Benzene	ND	6.40	12.8	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Bromobenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Bromochloromethane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Bromodichloromethane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Bromoform	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Bromomethane	ND	640	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
2-Butanone (MEK)	ND	320	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
n-Butylbenzene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
sec-Butylbenzene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
tert-Butylbenzene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Carbon disulfide	ND	320	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(0.5-1.5) (A0G0466-18)				Matrix: Soil		Batch: 0070574		
Carbon tetrachloride	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Chlorobenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Chloroethane	ND	320	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Chloroform	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Chloromethane	ND	160	320	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
2-Chlorotoluene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
4-Chlorotoluene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Dibromochloromethane	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	160	320	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Dibromomethane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2-Dichlorobenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,3-Dichlorobenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,4-Dichlorobenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Dichlorodifluoromethane	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1-Dichloroethane	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1-Dichloroethene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
cis-1,2-Dichloroethene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
trans-1,2-Dichloroethene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2-Dichloropropane	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,3-Dichloropropane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
2,2-Dichloropropane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1-Dichloropropene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
cis-1,3-Dichloropropene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
trans-1,3-Dichloropropene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Ethylbenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Hexachlorobutadiene	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
2-Hexanone	ND	320	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Isopropylbenzene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
4-Isopropyltoluene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Methylene chloride	ND	320	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	320	640	ug/kg dry	50	07/21/20 00:34	5035A/8260D	

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(0.5-1.5) (A0G0466-18)		Matrix: Soil			Batch: 0070574			
Methyl tert-butyl ether (MTBE)	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Naphthalene	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
n-Propylbenzene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Styrene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Tetrachloroethene (PCE)	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Toluene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2,3-Trichlorobenzene	ND	160	320	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2,4-Trichlorobenzene	ND	160	320	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1,1-Trichloroethane	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,1,2-Trichloroethane	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Trichloroethene (TCE)	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Trichlorofluoromethane	ND	64.0	128	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2,3-Trichloropropane	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,2,4-Trimethylbenzene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
1,3,5-Trimethylbenzene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
Vinyl chloride	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
m,p-Xylene	ND	32.0	64.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
o-Xylene	ND	16.0	32.0	ug/kg dry	50	07/21/20 00:34	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>102 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/21/20 00:34</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/21/20 00:34</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>		<i>79-120 %</i>	<i>1</i>	<i>07/21/20 00:34</i>	<i>5035A/8260D</i>

DP-17(2-3) (A0G0466-19)		Matrix: Soil			Batch: 0070574			
Acetone	ND	626	1250	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Acrylonitrile	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Benzene	ND	6.26	12.5	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Bromobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Bromochloromethane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Bromodichloromethane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Bromoform	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Bromomethane	ND	626	626	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
2-Butanone (MEK)	ND	313	626	ug/kg dry	50	07/21/20 01:28	5035A/8260D	

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9450 SW Commerce Circle
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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(2-3) (A0G0466-19)				Matrix: Soil		Batch: 0070574		
n-Butylbenzene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
sec-Butylbenzene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
tert-Butylbenzene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Carbon disulfide	ND	313	626	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Carbon tetrachloride	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Chlorobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Chloroethane	ND	313	626	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Chloroform	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Chloromethane	ND	157	313	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
2-Chlorotoluene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
4-Chlorotoluene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Dibromochloromethane	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	157	313	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Dibromomethane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2-Dichlorobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,3-Dichlorobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,4-Dichlorobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Dichlorodifluoromethane	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1-Dichloroethane	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1-Dichloroethene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
cis-1,2-Dichloroethene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
trans-1,2-Dichloroethene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2-Dichloropropane	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,3-Dichloropropane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
2,2-Dichloropropane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1-Dichloropropene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
cis-1,3-Dichloropropene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
trans-1,3-Dichloropropene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Ethylbenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Hexachlorobutadiene	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
2-Hexanone	ND	313	626	ug/kg dry	50	07/21/20 01:28	5035A/8260D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(2-3) (A0G0466-19)				Matrix: Soil		Batch: 0070574		
Isopropylbenzene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
4-Isopropyltoluene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Methylene chloride	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
4-Methyl-2-pentanone (MIBK)	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Naphthalene	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
n-Propylbenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Styrene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Tetrachloroethene (PCE)	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Toluene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2,3-Trichlorobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2,4-Trichlorobenzene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1,1-Trichloroethane	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,1,2-Trichloroethane	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Trichloroethene (TCE)	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Trichlorofluoromethane	ND	62.6	125	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2,3-Trichloropropane	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,2,4-Trimethylbenzene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
1,3,5-Trimethylbenzene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Vinyl chloride	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
m,p-Xylene	ND	31.3	62.6	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
o-Xylene	ND	15.7	31.3	ug/kg dry	50	07/21/20 01:28	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %	1	07/21/20 01:28	5035A/8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	07/21/20 01:28	5035A/8260D	
4-Bromofluorobenzene (Surr)		104 %		79-120 %	1	07/21/20 01:28	5035A/8260D	

DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070574		
Acetone	ND	65.1	1300	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Acrylonitrile	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Benzene	ND	6.51	13.0	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Bromobenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Bromochloromethane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070574		
Bromodichloromethane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Bromoform	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Bromomethane	ND	651	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
2-Butanone (MEK)	ND	325	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
n-Butylbenzene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
sec-Butylbenzene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
tert-Butylbenzene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Carbon disulfide	ND	325	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Carbon tetrachloride	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Chlorobenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Chloroethane	ND	325	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Chloroform	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Chloromethane	ND	163	325	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
2-Chlorotoluene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
4-Chlorotoluene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Dibromochloromethane	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	163	325	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Dibromomethane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2-Dichlorobenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,3-Dichlorobenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,4-Dichlorobenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Dichlorodifluoromethane	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1-Dichloroethane	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1-Dichloroethene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
cis-1,2-Dichloroethene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
trans-1,2-Dichloroethene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2-Dichloropropane	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,3-Dichloropropane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
2,2-Dichloropropane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1-Dichloropropene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
cis-1,3-Dichloropropene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070574		
trans-1,3-Dichloropropene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Ethylbenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Hexachlorobutadiene	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
2-Hexanone	ND	325	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Isopropylbenzene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
4-Isopropyltoluene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Methylene chloride	ND	325	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	325	651	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Naphthalene	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
n-Propylbenzene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Styrene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Tetrachloroethene (PCE)	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Toluene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2,3-Trichlorobenzene	ND	163	325	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2,4-Trichlorobenzene	ND	163	325	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1,1-Trichloroethane	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,1,2-Trichloroethane	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Trichloroethene (TCE)	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Trichlorofluoromethane	ND	65.1	130	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2,3-Trichloropropane	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,2,4-Trimethylbenzene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
1,3,5-Trimethylbenzene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Vinyl chloride	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
m,p-Xylene	ND	32.5	65.1	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
o-Xylene	ND	16.3	32.5	ug/kg dry	50	07/21/20 01:55	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %	1	07/21/20 01:55	5035A/8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	07/21/20 01:55	5035A/8260D	
4-Bromofluorobenzene (Surr)		103 %		79-120 %	1	07/21/20 01:55	5035A/8260D	

DP-19(0.5-1.5) (A0G0466-30)

Matrix: Soil

Batch: 0070607

Acetone	ND	637	1270	ug/kg dry	50	07/21/20 14:50	5035A/8260D

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070607		
Acrylonitrile	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Benzene	ND	6.37	12.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Bromobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Bromochloromethane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Bromodichloromethane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Bromoform	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Bromomethane	ND	637	637	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
2-Butanone (MEK)	ND	318	637	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
n-Butylbenzene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
sec-Butylbenzene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
tert-Butylbenzene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Carbon disulfide	ND	318	637	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Carbon tetrachloride	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Chlorobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Chloroethane	ND	318	637	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Chloroform	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Chloromethane	ND	159	318	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
2-Chlorotoluene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
4-Chlorotoluene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Dibromochloromethane	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	159	318	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Dibromomethane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2-Dichlorobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,3-Dichlorobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,4-Dichlorobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Dichlorodifluoromethane	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1-Dichloroethane	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1-Dichloroethene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
cis-1,2-Dichloroethene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
trans-1,2-Dichloroethene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2-Dichloropropane	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	

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Philip Nerenberg, Lab Director



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GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070607		
1,3-Dichloropropane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
2,2-Dichloropropane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1-Dichloropropene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
cis-1,3-Dichloropropene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
trans-1,3-Dichloropropene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Ethylbenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Hexachlorobutadiene	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
2-Hexanone	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Isopropylbenzene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
4-Isopropyltoluene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Methylene chloride	ND	63.7	1270	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Naphthalene	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
n-Propylbenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Styrene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Tetrachloroethene (PCE)	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Toluene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2,3-Trichlorobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2,4-Trichlorobenzene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1,1-Trichloroethane	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,1,2-Trichloroethane	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Trichloroethene (TCE)	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Trichlorofluoromethane	ND	63.7	127	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2,3-Trichloropropane	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,2,4-Trimethylbenzene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
1,3,5-Trimethylbenzene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
Vinyl chloride	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
m,p-Xylene	ND	31.8	63.7	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
o-Xylene	ND	15.9	31.8	ug/kg dry	50	07/21/20 14:50	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 112 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/21/20 14:50</i>	<i>5035A/8260D</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070607		
Surrogate: Toluene-d8 (Surr)		Recovery: 96 %	Limits: 80-120 %	1		07/21/20 14:50	5035A/8260D	
4-Bromofluorobenzene (Surr)		105 %	79-120 %	1		07/21/20 14:50	5035A/8260D	
Blank-1 (A0G0466-35)				Matrix: Water		Batch: 0070692		
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 13:39	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	07/23/20 13:39	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 13:39	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 13:39	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 13:39	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 13:39	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	

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Philip Nerenberg, Lab Director



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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-1 (A0G0466-35)		Matrix: Water			Batch: 0070692			
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 13:39	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 13:39	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Methylene chloride	ND	10.0	10.0	ug/L	1	07/23/20 13:39	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	07/23/20 13:39	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 13:39	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 13:39	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-1 (A0G0466-35)		Matrix: Water			Batch: 0070692			
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/23/20 13:39	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/23/20 13:39	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	07/23/20 13:39	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/23/20 13:39</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 13:39</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 13:39</i>	<i>EPA 8260D</i>	
Blank-2 (A0G0466-36)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 14:06	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	07/23/20 14:06	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 14:06	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 14:06	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 14:06	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 14:06	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-2 (A0G0466-36)		Matrix: Water			Batch: 0070692			
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 14:06	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 14:06	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 14:06	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 14:06	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 14:06	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	

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Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-2 (A0G0466-36)		Matrix: Water			Batch: 0070692			
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/23/20 14:06	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/23/20 14:06	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	07/23/20 14:06	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>104 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/23/20 14:06</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 14:06</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 14:06</i>	<i>EPA 8260D</i>
Blank-3 (A0G0466-37)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 14:34	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	07/23/20 14:34	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 14:34	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 14:34	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 14:34	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 14:34	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	07/23/20 14:34	EPA 8260D	

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-3 (A0G0466-37)		Matrix: Water			Batch: 0070692			
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 14:34	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 14:34	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 14:34	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 14:34	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 14:34	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 14:34	EPA 8260D	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-3 (A0G0466-37)		Matrix: Water			Batch: 0070692			
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/23/20 14:34	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/23/20 14:34	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	07/23/20 14:34	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>102 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/23/20 14:34</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 14:34</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 14:34</i>	<i>EPA 8260D</i>
Blank-4 (A0G0466-38)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 15:01	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	07/23/20 15:01	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 15:01	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 15:01	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 15:01	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 15:01	EPA 8260D	

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Philip Nerenberg, Lab Director

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

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-4 (A0G0466-38)		Matrix: Water			Batch: 0070692			
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 15:01	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 15:01	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 15:01	EPA 8260D	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	07/23/20 15:01	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 15:01	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 15:01	EPA 8260D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-4 (A0G0466-38)		Matrix: Water			Batch: 0070692			
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/23/20 15:01	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/23/20 15:01	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	07/23/20 15:01	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/23/20 15:01</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:01</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:01</i>	<i>EPA 8260D</i>	
Blank-5 (A0G0466-39)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 15:28	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	07/23/20 15:28	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 15:28	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 15:28	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 15:28	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-5 (A0G0466-39)		Matrix: Water			Batch: 0070692			
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 15:28	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 15:28	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 15:28	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 15:28	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 15:28	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-5 (A0G0466-39)		Matrix: Water			Batch: 0070692			
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 15:28	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/23/20 15:28	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/23/20 15:28	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	07/23/20 15:28	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>103 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:28</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:28</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:28</i>	<i>EPA 8260D</i>

Blank-6 (A0G0466-40)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 15:55	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Benzene	ND	0.100	0.200	ug/L	1	07/23/20 15:55	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 15:55	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 15:55	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-6 (A0G0466-40)		Matrix: Water			Batch: 0070692			
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 15:55	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Chloroform	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 15:55	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 15:55	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 15:55	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	

Apex Laboratories

Philip Nerenberg, Lab Director

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

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Blank-6 (A0G0466-40)		Matrix: Water			Batch: 0070692			
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Methylene chloride	ND	10.0	10.0	ug/L	1	07/23/20 15:55	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 15:55	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 15:55	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/23/20 15:55	EPA 8260D	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/23/20 15:55	EPA 8260D	
o-Xylene	ND	0.250	0.500	ug/L	1	07/23/20 15:55	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/23/20 15:55</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:55</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 15:55</i>	<i>EPA 8260D</i>	

DP-14W (A0G0466-41)		Matrix: Water			Batch: 0070681			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 08:41	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:41	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41)		Matrix: Water			Batch: 0070681			
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 08:41	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 08:41	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 08:41	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:41	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 08:41	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:41	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:41	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:41	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
cis-1,2-Dichloroethene	3.18	0.200	0.400	ug/L	1	07/23/20 08:41	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 08:41	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 08:41	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 08:41	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 08:41	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 08:41	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:41	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 08:41	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 08:41	EPA 8260D	
Tetrachloroethene (PCE)	1.71	0.200	0.400	ug/L	1	07/23/20 08:41	EPA 8260D	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41)		Matrix: Water			Batch: 0070681			
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 08:41	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 08:41	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 08:41	EPA 8260D	
Trichloroethene (TCE)	2.06	0.200	0.400	ug/L	1	07/23/20 08:41	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 08:41	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>102 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/23/20 08:41</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 08:41</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 08:41</i>	<i>EPA 8260D</i>
DP-15W (A0G0466-42)		Matrix: Water			Batch: 0070681			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 07:47	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 07:47	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 07:47	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 07:47	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 07:47	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 07:47	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 07:47	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 07:47	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 07:47	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 07:47	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	

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Philip Nerenberg, Lab Director



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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15W (A0G0466-42)		Matrix: Water			Batch: 0070681			
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 07:47	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 07:47	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 07:47	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 07:47	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 07:47	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 07:47	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 07:47	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 07:47	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 07:47	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 07:47	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 07:47	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 07:47	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/23/20 07:47</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 07:47</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 07:47</i>	<i>EPA 8260D</i>	
DP-16W (A0G0466-43)		Matrix: Water			Batch: 0070681			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 08:14	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:14	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 08:14	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 08:14	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 08:14	EPA 8260D	

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Philip Nerenberg, Lab Director



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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W (A0G0466-43)		Matrix: Water			Batch: 0070681			
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:14	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 08:14	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:14	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:14	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:14	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 08:14	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 08:14	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 08:14	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 08:14	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 08:14	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 08:14	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 08:14	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 08:14	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 08:14	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 08:14	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 08:14	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 08:14	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %	1	07/23/20 08:14	EPA 8260D	
Toluene-d8 (Surr)		101 %		80-120 %	1	07/23/20 08:14	EPA 8260D	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	07/23/20 08:14	EPA 8260D	

DP-16W-DUP (A0G0466-44)

Matrix: Water

Batch: 0070692

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W-DUP (A0G0466-44)				Matrix: Water		Batch: 0070692		
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 16:22	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 16:22	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 16:22	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 16:22	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 16:22	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 16:22	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 16:22	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 16:22	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 16:22	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 16:22	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 16:22	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 16:22	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 16:22	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 16:22	EPA 8260D	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W-DUP (A0G0466-44)		Matrix: Water			Batch: 0070692			
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 16:22	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 16:22	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 16:22	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 16:22	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 16:22	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 16:22	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 16:22	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 16:22	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>103 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/23/20 16:22</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 16:22</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 16:22</i>	<i>EPA 8260D</i>
DP-17W (A0G0466-45)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 17:17	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:17	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 17:17	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 17:17	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 17:17	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:17	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 17:17	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:17	EPA 8260D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17W (A0G0466-45)		Matrix: Water			Batch: 0070692			
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:17	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:17	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 17:17	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 17:17	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 17:17	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 17:17	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 17:17	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:17	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 17:17	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 17:17	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 17:17	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 17:17	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 17:17	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 17:17	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>103 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/23/20 17:17</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 17:17</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/23/20 17:17</i>	<i>EPA 8260D</i>

DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 17:44	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:44	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 17:44	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 17:44	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070692			
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 17:44	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:44	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 17:44	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:44	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:44	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:44	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 17:44	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 17:44	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 17:44	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 17:44	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 17:44	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 17:44	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 17:44	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 17:44	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 17:44	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 17:44	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 17:44	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 17:44	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/23/20 17:44</i>	<i>EPA 8260D</i>	

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Philip Nerenberg, Lab Director

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070692			
Surrogate: Toluene-d8 (Surr)		Recovery: 101 %	Limits: 80-120 %	1	07/23/20 17:44	EPA 8260D		
4-Bromofluorobenzene (Surr)		103 %	80-120 %	1	07/23/20 17:44	EPA 8260D		
DP-19W (A0G0466-47)		Matrix: Water			Batch: 0070692			
Acetone	ND	10.0	20.0	ug/L	1	07/23/20 18:11	EPA 8260D	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/23/20 18:11	EPA 8260D	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Bromoform	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Bromomethane	ND	5.00	5.00	ug/L	1	07/23/20 18:11	EPA 8260D	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/23/20 18:11	EPA 8260D	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/23/20 18:11	EPA 8260D	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 18:11	EPA 8260D	
Chloroethane	ND	5.00	5.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Chloromethane	ND	2.50	5.00	ug/L	1	07/23/20 18:11	EPA 8260D	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 18:11	EPA 8260D	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 18:11	EPA 8260D	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/23/20 18:11	EPA 8260D	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/23/20 18:11	EPA 8260D	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/23/20 18:11	EPA 8260D	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19W (A0G0466-47)		Matrix: Water			Batch: 0070692			
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Methylene chloride	ND	5.00	10.0	ug/L	1	07/23/20 18:11	EPA 8260D	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/23/20 18:11	EPA 8260D	
Naphthalene	ND	1.00	2.00	ug/L	1	07/23/20 18:11	EPA 8260D	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/23/20 18:11	EPA 8260D	
Styrene	ND	0.500	1.00	ug/L	1	07/23/20 18:11	EPA 8260D	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	07/23/20 18:11	EPA 8260D	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 18:11	EPA 8260D	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/23/20 18:11	EPA 8260D	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/23/20 18:11	EPA 8260D	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/23/20 18:11	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %	1	07/23/20 18:11	EPA 8260D	
Toluene-d8 (Surr)		100 %		80-120 %	1	07/23/20 18:11	EPA 8260D	
4-Bromofluorobenzene (Surr)		103 %		80-120 %	1	07/23/20 18:11	EPA 8260D	

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41)				Matrix: Water		Batch: 0070726		
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
Ethylbenzene	0.0818	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	J
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
trans-1,2-Dichloroethene	0.0104	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	J
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 16:13	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>101 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/24/20 16:13</i>	<i>EPA 8260D SIM</i>
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 16:13</i>	<i>EPA 8260D SIM</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 16:13</i>	<i>EPA 8260D SIM</i>

DP-15W (A0G0466-42)				Matrix: Water		Batch: 0070726		
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
Ethylbenzene	0.0545	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	J
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15W (A0G0466-42)		Matrix: Water			Batch: 0070726			
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.0200	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,1,1,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
Tetrachloroethene (PCE)	0.0465	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.0200	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 16:40	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/20 16:40</i>	<i>EPA 8260D SIM</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 16:40</i>	<i>EPA 8260D SIM</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 16:40</i>	<i>EPA 8260D SIM</i>	

DP-16W (A0G0466-43)		Matrix: Water			Batch: 0070726			
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W (A0G0466-43)		Matrix: Water			Batch: 0070726			
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 17:07	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/20 17:07</i>	<i>EPA 8260D SIM</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 17:07</i>	<i>EPA 8260D SIM</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 17:07</i>	<i>EPA 8260D SIM</i>	
DP-16W-DUP (A0G0466-44)		Matrix: Water			Batch: 0070726			
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W-DUP (A0G0466-44)		Matrix: Water			Batch: 0070726			
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 17:34	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>100 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>07/24/20 17:34</i>	<i>EPA 8260D SIM</i>
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 17:34</i>	<i>EPA 8260D SIM</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 17:34</i>	<i>EPA 8260D SIM</i>
DP-17W (A0G0466-45)		Matrix: Water			Batch: 0070726			
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D SIM**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17W (A0G0466-45)		Matrix: Water			Batch: 0070726			
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 18:00	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/20 18:00</i>	<i>EPA 8260D SIM</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 18:00</i>	<i>EPA 8260D SIM</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 18:00</i>	<i>EPA 8260D SIM</i>	
DP-18W (A0G0466-46)		Matrix: Water			Batch: 0070726			
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	

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Philip Nerenberg, Lab Director



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503-718-2323
ORELAP ID: OR100062

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46)		Matrix: Water				Batch: 0070726		
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 18:27	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/20 18:27</i>	<i>EPA 8260D SIM</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 18:27</i>	<i>EPA 8260D SIM</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 18:27</i>	<i>EPA 8260D SIM</i>	
DP-19W (A0G0466-47)		Matrix: Water				Batch: 0070726		
Benzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Toluene	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Methyl tert-butyl ether (MTBE)	0.0215	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	07/24/20 18:54	EPA 8260D SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/20 18:54</i>	<i>EPA 8260D SIM</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/20 18:54</i>	<i>EPA 8260D SIM</i>	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19W (A0G0466-47)				Matrix: Water		Batch: 0070726		
<i>Surrogate: 4-Bromofluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/20 18:54</i>	<i>EPA 8260D SIM</i>		

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Polychlorinated Biphenyls by EPA 8082A**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01RE1)		Matrix: Soil		Batch: 0070563		C-07		
Aroclor 1016	ND	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	
Aroclor 1221	ND	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	
Aroclor 1232	ND	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	
Aroclor 1242	ND	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	
Aroclor 1248	ND	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	
Aroclor 1254	830	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	P-10, Q-39, Q-42
Aroclor 1260	261	42.4	84.7	ug/kg dry	20	07/22/20 11:02	EPA 8082A	P-10, Q-39, Q-42
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 110 %</i>		<i>Limits: 60-125 %</i>	20	07/22/20 11:02	EPA 8082A	<i>S-05</i>
DP-14(1.5-2.5) (A0G0466-02RE1)		Matrix: Soil		Batch: 0070563		C-07		
Aroclor 1016	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
Aroclor 1221	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
Aroclor 1232	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
Aroclor 1242	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
Aroclor 1248	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
Aroclor 1254	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
Aroclor 1260	ND	2.15	4.30	ug/kg dry	1	07/23/20 12:22	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 60-125 %</i>	1	07/23/20 12:22	EPA 8082A	
DP-15(1-2) (A0G0466-07RE1)		Matrix: Soil		Batch: 0070563		C-07		
Aroclor 1016	ND	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	
Aroclor 1221	ND	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	
Aroclor 1232	ND	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	
Aroclor 1242	ND	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	
Aroclor 1248	11500	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	P-10
Aroclor 1254	ND	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	
Aroclor 1260	938	209	418	ug/kg dry	100	07/23/20 12:58	EPA 8082A	P-10
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 84 %</i>		<i>Limits: 60-125 %</i>	100	07/23/20 12:58	EPA 8082A	<i>S-05</i>
DP-15(2.5-3.5) (A0G0466-08RE1)		Matrix: Soil		Batch: 0070563		C-07		
Aroclor 1016	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	
Aroclor 1221	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Polychlorinated Biphenyls by EPA 8082A**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(2.5-3.5) (A0G0466-08RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1232	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	
Aroclor 1242	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	
Aroclor 1248	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	
Aroclor 1254	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	
Aroclor 1260	ND	2.08	4.16	ug/kg dry	1	07/23/20 13:33	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 109 %		Limits: 60-125 %	1	07/23/20 13:33	EPA 8082A	
DP-16(6-7) (A0G0466-13RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1016	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Aroclor 1221	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Aroclor 1232	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Aroclor 1242	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Aroclor 1248	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Aroclor 1254	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Aroclor 1260	ND	2.07	4.14	ug/kg dry	1	07/23/20 14:08	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 100 %		Limits: 60-125 %	1	07/23/20 14:08	EPA 8082A	
DP-17(0.5-1.5) (A0G0466-18RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1016	ND	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Aroclor 1221	ND	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Aroclor 1232	ND	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Aroclor 1242	ND	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Aroclor 1248	ND	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Aroclor 1254	28.7	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Aroclor 1260	ND	2.30	4.59	ug/kg dry	1	07/23/20 12:05	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 106 %		Limits: 60-125 %	1	07/23/20 12:05	EPA 8082A	
DP-17(2-3) (A0G0466-19RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1016	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	
Aroclor 1221	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	
Aroclor 1232	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	
Aroclor 1242	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	
Aroclor 1248	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(2-3) (A0G0466-19RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1254	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	
Aroclor 1260	ND	2.42	4.84	ug/kg dry	1	07/23/20 12:40	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 102 %		Limits: 60-125 %	1	07/23/20 12:40	EPA 8082A	
DP-18(2-3) (A0G0466-24RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1016	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Aroclor 1221	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Aroclor 1232	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Aroclor 1242	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Aroclor 1248	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Aroclor 1254	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Aroclor 1260	ND	2.46	4.93	ug/kg dry	1	07/23/20 13:15	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 104 %		Limits: 60-125 %	1	07/23/20 13:15	EPA 8082A	
DP-19(0.5-1.5) (A0G0466-30RE1)				Matrix: Soil		Batch: 0070563		C-07
Aroclor 1016	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Aroclor 1221	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Aroclor 1232	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Aroclor 1242	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Aroclor 1248	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Aroclor 1254	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Aroclor 1260	ND	2.30	4.59	ug/kg dry	1	07/23/20 13:51	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 108 %		Limits: 60-125 %	1	07/23/20 13:51	EPA 8082A	
DP-14W (A0G0466-41)				Matrix: Water		Batch: 0080022		C-07
Aroclor 1016	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Aroclor 1221	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Aroclor 1232	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Aroclor 1242	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Aroclor 1248	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Aroclor 1254	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Aroclor 1260	ND	0.0194	0.0388	ug/L	1	08/05/20 17:27	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 74 %		Limits: 40-135 %	1	08/05/20 17:27	EPA 8082A	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15W (A0G0466-42)		Matrix: Water			Batch: 0080022		C-07	
Aroclor 1016	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
Aroclor 1221	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
Aroclor 1232	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
Aroclor 1242	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
Aroclor 1248	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
Aroclor 1254	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
Aroclor 1260	ND	0.0194	0.0388	ug/L	1	08/05/20 17:45	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 71 %</i>		<i>Limits: 40-135 %</i>	<i>1</i>	<i>08/05/20 17:45</i>	<i>EPA 8082A</i>	
DP-17W (A0G0466-45)		Matrix: Water			Batch: 0080022		C-07	
Aroclor 1016	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
Aroclor 1221	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
Aroclor 1232	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
Aroclor 1242	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
Aroclor 1248	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
Aroclor 1254	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
Aroclor 1260	ND	0.0192	0.0385	ug/L	1	08/05/20 18:03	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 85 %</i>		<i>Limits: 40-135 %</i>	<i>1</i>	<i>08/05/20 18:03</i>	<i>EPA 8082A</i>	

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Wilsonville, OR 97070

Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Acenaphthylene	123	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Anthracene	106	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Benz(a)anthracene	624	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Benzo(a)pyrene	951	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Benzo(b)fluoranthene	1390	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Benzo(k)fluoranthene	390	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	M-05
Benzo(g,h,i)perylene	976	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Chrysene	778	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Dibenz(a,h)anthracene	225	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Fluoranthene	673	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Fluorene	ND	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	938	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
1-Methylnaphthalene	ND	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
2-Methylnaphthalene	ND	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Naphthalene	ND	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Phenanthrene	172	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Pyrene	815	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Dibenzofuran	ND	28.0	56.1	ug/kg dry	5	07/22/20 11:02	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 83 %		Limits: 44-120 %	5	07/22/20 11:02	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		84 %		54-127 %	5	07/22/20 11:02	EPA 8270E SIM	

DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Acenaphthylene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Anthracene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Benz(a)anthracene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Benzo(a)pyrene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Chrysene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	

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Philip Nerenberg, Lab Director



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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070592		
Fluoranthene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Fluorene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
1-Methylnaphthalene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
2-Methylnaphthalene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Naphthalene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Phenanthrene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Pyrene	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Dibenzofuran	ND	5.57	11.1	ug/kg dry	1	07/22/20 11:27	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 82 %		Limits: 44-120 %	1	07/22/20 11:27	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		82 %		54-127 %	1	07/22/20 11:27	EPA 8270E SIM	
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Acenaphthylene	719	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Anthracene	397	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Benz(a)anthracene	1540	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Benzo(a)pyrene	2860	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Benzo(b)fluoranthene	3860	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Benzo(k)fluoranthene	888	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	M-05
Benzo(g,h,i)perylene	3400	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Chrysene	2160	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Dibenz(a,h)anthracene	793	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Fluoranthene	1400	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Fluorene	ND	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	3130	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
1-Methylnaphthalene	ND	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
2-Methylnaphthalene	ND	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Naphthalene	114	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	J
Phenanthrene	426	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Pyrene	2310	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Dibenzofuran	ND	110	219	ug/kg dry	20	07/22/20 11:53	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 79 %		Limits: 44-120 %	20	07/22/20 11:53	EPA 8270E SIM	

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070592		
<i>Surrogate: p-Terphenyl-d14 (Surr)</i>		<i>Recovery: 82 %</i>	<i>Limits: 54-127 %</i>	<i>20</i>	<i>07/22/20 11:53</i>	<i>EPA 8270E SIM</i>		
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Acenaphthylene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Anthracene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Benz(a)anthracene	7.89	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
Benzo(a)pyrene	6.35	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
Benzo(b)fluoranthene	6.28	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
Benzo(k)fluoranthene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Benzo(g,h,i)perylene	5.19	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
Chrysene	6.17	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
Dibenz(a,h)anthracene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Fluoranthene	8.27	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
Fluorene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	5.10	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	J
1-Methylnaphthalene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
2-Methylnaphthalene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Naphthalene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Phenanthrene	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Pyrene	11.1	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
Dibenzofuran	ND	4.99	9.97	ug/kg dry	1	07/22/20 12:18	EPA 8270E SIM	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 72 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>07/22/20 12:18</i>	<i>EPA 8270E SIM</i>		
<i>p-Terphenyl-d14 (Surr)</i>		<i>83 %</i>	<i>54-127 %</i>	<i>1</i>	<i>07/22/20 12:18</i>	<i>EPA 8270E SIM</i>		
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Acenaphthylene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Anthracene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Benz(a)anthracene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Benzo(a)pyrene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	

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Philip Nerenberg, Lab Director



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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16(6-7) (A0G0466-13)		Matrix: Soil			Batch: 0070592			
Chrysene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Fluoranthene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Fluorene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
1-Methylnaphthalene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
2-Methylnaphthalene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Naphthalene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Phenanthrene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Pyrene	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Dibenzofuran	ND	5.20	10.4	ug/kg dry	1	07/22/20 12:44	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 73 %		Limits: 44-120 %	1	07/22/20 12:44	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		79 %		54-127 %	1	07/22/20 12:44	EPA 8270E SIM	
DP-17(0.5-1.5) (A0G0466-18)		Matrix: Soil			Batch: 0070592			
Acenaphthene	ND	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Acenaphthylene	8.95	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	J
Anthracene	8.27	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	J
Benz(a)anthracene	21.2	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Benzo(a)pyrene	34.0	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Benzo(b)fluoranthene	43.2	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Benzo(k)fluoranthene	16.3	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	M-05
Benzo(g,h,i)perylene	43.7	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Chrysene	33.9	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Fluoranthene	62.9	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Fluorene	ND	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	37.8	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
1-Methylnaphthalene	ND	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
2-Methylnaphthalene	6.65	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	J
Naphthalene	31.8	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Phenanthrene	27.9	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Pyrene	80.5	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(0.5-1.5) (A0G0466-18)				Matrix: Soil		Batch: 0070592		
Dibenzofuran	ND	5.97	11.9	ug/kg dry	1	07/22/20 13:09	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 69 %		Limits: 44-120 %	1	07/22/20 13:09	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		76 %		54-127 %	1	07/22/20 13:09	EPA 8270E SIM	
DP-17(2-3) (A0G0466-19RE1)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Acenaphthylene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Anthracene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Benz(a)anthracene	7.57	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	J
Benzo(a)pyrene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Chrysene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Fluoranthene	7.77	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	J
Fluorene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
1-Methylnaphthalene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
2-Methylnaphthalene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Naphthalene	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Phenanthrene	6.24	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	J
Pyrene	9.97	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	J
Dibenzofuran	ND	6.23	12.5	ug/kg dry	1	07/22/20 20:02	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 79 %		Limits: 44-120 %	1	07/22/20 20:02	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		93 %		54-127 %	1	07/22/20 20:02	EPA 8270E SIM	
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Acenaphthylene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Anthracene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Benz(a)anthracene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Benzo(a)pyrene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	

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Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070592		
Benzo(k)fluoranthene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	J
Benzo(g,h,i)perylene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Chrysene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Fluoranthene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Fluorene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
1-Methylnaphthalene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
2-Methylnaphthalene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Naphthalene	7.97	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Phenanthrene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Pyrene	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Dibenzofuran	ND	6.13	12.3	ug/kg dry	1	07/22/20 14:00	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 69 %		Limits: 44-120 %	1	07/22/20 14:00	EPA 8270E SIM	
p-Terphenyl-d14 (Surr)		77 %		54-127 %	1	07/22/20 14:00	EPA 8270E SIM	
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070592		
Acenaphthene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Acenaphthylene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Anthracene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Benz(a)anthracene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Benzo(a)pyrene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Chrysene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Fluoranthene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Fluorene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
1-Methylnaphthalene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
2-Methylnaphthalene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Naphthalene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070592		
Phenanthrene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Pyrene	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
Dibenzofuran	ND	5.79	11.6	ug/kg dry	1	07/21/20 16:31	EPA 8270E SIM	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 82 %</i>		<i>Limits: 44-120 %</i>	<i>1</i>	<i>07/21/20 16:31</i>	<i>EPA 8270E SIM</i>	
<i>p-Terphenyl-d14 (Surr)</i>		<i>83 %</i>		<i>54-127 %</i>	<i>1</i>	<i>07/21/20 16:31</i>	<i>EPA 8270E SIM</i>	

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41RE2)				Matrix: Water		Batch: 0070683		
Acenaphthene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Acenaphthylene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Anthracene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Benz(a)anthracene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Benzo(a)pyrene	ND	0.0140	0.0280	ug/L	1	07/23/20 16:43	EPA 8270E	
Benzo(b)fluoranthene	ND	0.0140	0.0280	ug/L	1	07/23/20 16:43	EPA 8270E	
Benzo(k)fluoranthene	ND	0.0140	0.0280	ug/L	1	07/23/20 16:43	EPA 8270E	
Benzo(g,h,i)perylene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Chrysene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Fluoranthene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Fluorene	0.0125	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	J
Indeno(1,2,3-cd)pyrene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
1-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	07/23/20 16:43	EPA 8270E	
2-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	07/23/20 16:43	EPA 8270E	
Naphthalene	0.0226	0.0187	0.0374	ug/L	1	07/23/20 16:43	EPA 8270E	J
Phenanthrene	0.0247	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Pyrene	0.00936	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	J
Carbazole	ND	0.0140	0.0280	ug/L	1	07/23/20 16:43	EPA 8270E	
Dibenzofuran	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
2-Chlorophenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
2,4-Dichlorophenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
2,4-Dimethylphenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
2,4-Dinitrophenol	ND	0.234	0.467	ug/L	1	07/23/20 16:43	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	0.234	0.467	ug/L	1	07/23/20 16:43	EPA 8270E	
2-Methylphenol	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
2-Nitrophenol	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
4-Nitrophenol	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
Phenol	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41RE2)				Matrix: Water		Batch: 0070683		
2,3,5,6-Tetrachlorophenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
Nitrobenzene	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
Butyl benzyl phthalate	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
Diethylphthalate	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
Dimethylphthalate	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
Di-n-butylphthalate	0.245	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	J
Di-n-octyl phthalate	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
N-Nitrosodimethylamine	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0561	0.0561	ug/L	1	07/23/20 16:43	EPA 8270E	R-02
N-Nitrosodiphenylamine	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Hexachlorobenzene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
Hexachlorobutadiene	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
Hexachloroethane	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
2-Chloronaphthalene	ND	0.00935	0.0187	ug/L	1	07/23/20 16:43	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Aniline	ND	0.0467	0.0935	ug/L	1	07/23/20 16:43	EPA 8270E	
4-Chloroaniline	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
2-Nitroaniline	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
3-Nitroaniline	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
4-Nitroaniline	ND	0.187	0.374	ug/L	1	07/23/20 16:43	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
2,6-Dinitrotoluene	ND	0.187	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
Benzoic acid	ND	1.17	2.34	ug/L	1	07/23/20 16:43	EPA 8270E	
Benzyl alcohol	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	

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Philip Nerenberg, Lab Director



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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41RE2)		Matrix: Water			Batch: 0070683			
Isophorone	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Azobenzene (1,2-DPH)	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	0.234	0.467	ug/L	1	07/23/20 16:43	EPA 8270E	
3,3'-Dichlorobenzidine	ND	0.467	0.935	ug/L	1	07/23/20 16:43	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/23/20 16:43	EPA 8270E	
1,3-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/23/20 16:43	EPA 8270E	
1,4-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/23/20 16:43	EPA 8270E	
Pyridine	ND	0.0935	0.187	ug/L	1	07/23/20 16:43	EPA 8270E	
1,2-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
1,3-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
1,4-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/23/20 16:43	EPA 8270E	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	45 %	<i>Limits:</i>	44-120 %	1	07/23/20 16:43	EPA 8270E
<i>2-Fluorobiphenyl (Surr)</i>			44 %		44-120 %	1	07/23/20 16:43	EPA 8270E
<i>Phenol-d6 (Surr)</i>			15 %		10-133 %	1	07/23/20 16:43	EPA 8270E
<i>p-Terphenyl-d14 (Surr)</i>			71 %		50-134 %	1	07/23/20 16:43	EPA 8270E
<i>2-Fluorophenol (Surr)</i>			23 %		19-120 %	1	07/23/20 16:43	EPA 8270E
<i>2,4,6-Tribromophenol (Surr)</i>			91 %		43-140 %	1	07/23/20 16:43	EPA 8270E
DP-15W (A0G0466-42RE1)		Matrix: Water			Batch: 0070683			
Acenaphthene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Acenaphthylene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Benz(a)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Benzo(a)pyrene	ND	0.0142	0.0283	ug/L	1	07/23/20 17:17	EPA 8270E	
Benzo(b)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 17:17	EPA 8270E	
Benzo(k)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 17:17	EPA 8270E	
Benzo(g,h,i)perylene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Chrysene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Fluoranthene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Fluorene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 17:17	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 17:17	EPA 8270E	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15W (A0G0466-42RE1)				Matrix: Water		Batch: 0070683		
Naphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 17:17	EPA 8270E	
Phenanthrene	0.00962	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	J
Pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Carbazole	ND	0.0142	0.0283	ug/L	1	07/23/20 17:17	EPA 8270E	
Dibenzofuran	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
2-Chlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
2,4-Dichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
2,4-Dimethylphenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
2,4-Dinitrophenol	ND	0.236	0.472	ug/L	1	07/23/20 17:17	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	0.236	0.472	ug/L	1	07/23/20 17:17	EPA 8270E	
2-Methylphenol	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
2-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
4-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
Phenol	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
Nitrobenzene	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
Butyl benzyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
Diethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
Dimethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
Di-n-butylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
Di-n-octyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
N-Nitrosodimethylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
N-Nitrosodiphenylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	

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Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15W (A0G0466-42RE1)				Matrix: Water		Batch: 0070683		
2,2'-Oxybis(1-Chloropropane)	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Hexachlorobenzene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
Hexachlorobutadiene	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
Hexachloroethane	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
2-Chloronaphthalene	ND	0.00943	0.0189	ug/L	1	07/23/20 17:17	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Aniline	ND	0.0472	0.0943	ug/L	1	07/23/20 17:17	EPA 8270E	
4-Chloroaniline	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
2-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
3-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
4-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 17:17	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
2,6-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
Benzoic acid	ND	1.18	2.36	ug/L	1	07/23/20 17:17	EPA 8270E	
Benzyl alcohol	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
Isophorone	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Azobenzene (1,2-DPH)	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	0.236	0.472	ug/L	1	07/23/20 17:17	EPA 8270E	
3,3'-Dichlorobenzidine	ND	0.472	0.943	ug/L	1	07/23/20 17:17	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 17:17	EPA 8270E	
1,3-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 17:17	EPA 8270E	
1,4-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 17:17	EPA 8270E	
Pyridine	ND	0.0943	0.189	ug/L	1	07/23/20 17:17	EPA 8270E	
1,2-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
1,3-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
1,4-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 17:17	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 45 %		Limits: 44-120 %	1	07/23/20 17:17	EPA 8270E	
2-Fluorobiphenyl (Surr)		41 %		44-120 %	1	07/23/20 17:17	EPA 8270E	S-03
Phenol-d6 (Surr)		15 %		10-133 %	1	07/23/20 17:17	EPA 8270E	
p-Terphenyl-d14 (Surr)		68 %		50-134 %	1	07/23/20 17:17	EPA 8270E	
2-Fluorophenol (Surr)		22 %		19-120 %	1	07/23/20 17:17	EPA 8270E	

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Philip Nerenberg

Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15W (A0G0466-42RE1)		Matrix: Water			Batch: 0070683			
<i>Surrogate: 2,4,6-Tribromophenol (Surr)</i>		<i>Recovery: 86 %</i>		<i>Limits: 43-140 %</i>	<i>1</i>	<i>07/23/20 17:17</i>	<i>EPA 8270E</i>	
DP-16W (A0G0466-43RE1)		Matrix: Water			Batch: 0070683			
Acenaphthene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Acenaphthylene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Anthracene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Benz(a)anthracene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Benzo(a)pyrene	ND	0.0143	0.0286	ug/L	1	07/23/20 17:51	EPA 8270E	
Benzo(b)fluoranthene	ND	0.0143	0.0286	ug/L	1	07/23/20 17:51	EPA 8270E	
Benzo(k)fluoranthene	ND	0.0143	0.0286	ug/L	1	07/23/20 17:51	EPA 8270E	
Benzo(g,h,i)perylene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Chrysene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Fluoranthene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Fluorene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
1-Methylnaphthalene	ND	0.0190	0.0381	ug/L	1	07/23/20 17:51	EPA 8270E	
2-Methylnaphthalene	ND	0.0190	0.0381	ug/L	1	07/23/20 17:51	EPA 8270E	
Naphthalene	ND	0.0190	0.0381	ug/L	1	07/23/20 17:51	EPA 8270E	
Phenanthrene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Pyrene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Carbazole	ND	0.0143	0.0286	ug/L	1	07/23/20 17:51	EPA 8270E	
Dibenzofuran	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
2-Chlorophenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	
2,4-Dichlorophenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
2,4-Dimethylphenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
2,4-Dinitrophenol	ND	0.238	0.476	ug/L	1	07/23/20 17:51	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	0.238	0.476	ug/L	1	07/23/20 17:51	EPA 8270E	
2-Methylphenol	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
2-Nitrophenol	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	
4-Nitrophenol	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W (A0G0466-43RE1)				Matrix: Water		Batch: 0070683		
Phenol	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
Nitrobenzene	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
Butyl benzyl phthalate	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
Diethylphthalate	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
Dimethylphthalate	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
Di-n-butylphthalate	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
Di-n-octyl phthalate	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
N-Nitrosodimethylamine	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
N-Nitrosodiphenylamine	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
Hexachlorobenzene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
Hexachlorobutadiene	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
Hexachloroethane	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
2-Chloronaphthalene	ND	0.00952	0.0190	ug/L	1	07/23/20 17:51	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
Aniline	ND	0.0476	0.0952	ug/L	1	07/23/20 17:51	EPA 8270E	
4-Chloroaniline	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E	
2-Nitroaniline	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
3-Nitroaniline	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
4-Nitroaniline	ND	0.190	0.381	ug/L	1	07/23/20 17:51	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	
2,6-Dinitrotoluene	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E	

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Philip Nerenberg, Lab Director



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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
DP-16W (A0G0466-43RE1)				Matrix: Water		Batch: 0070683			
Benzoic acid	ND	1.19	2.38	ug/L	1	07/23/20 17:51	EPA 8270E	Q-52	
Benzyl alcohol	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E		
Isophorone	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E		
Azobenzene (1,2-DPH)	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E		
Bis(2-Ethylhexyl) adipate	ND	0.238	0.476	ug/L	1	07/23/20 17:51	EPA 8270E		
3,3'-Dichlorobenzidine	ND	0.476	0.952	ug/L	1	07/23/20 17:51	EPA 8270E		
1,2-Dinitrobenzene	ND	0.238	0.476	ug/L	1	07/23/20 17:51	EPA 8270E		
1,3-Dinitrobenzene	ND	0.238	0.476	ug/L	1	07/23/20 17:51	EPA 8270E		
1,4-Dinitrobenzene	ND	0.238	0.476	ug/L	1	07/23/20 17:51	EPA 8270E		
Pyridine	ND	0.0952	0.190	ug/L	1	07/23/20 17:51	EPA 8270E		
1,2-Dichlorobenzene	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E		
1,3-Dichlorobenzene	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E		
1,4-Dichlorobenzene	ND	0.0238	0.0476	ug/L	1	07/23/20 17:51	EPA 8270E		
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:		46 %	Limits:	44-120 %	1		07/23/20 17:51
2-Fluorobiphenyl (Surr)				44 %		44-120 %	1	07/23/20 17:51	EPA 8270E
Phenol-d6 (Surr)				14 %		10-133 %	1	07/23/20 17:51	EPA 8270E
p-Terphenyl-d14 (Surr)				66 %		50-134 %	1	07/23/20 17:51	EPA 8270E
2-Fluorophenol (Surr)				22 %		19-120 %	1	07/23/20 17:51	EPA 8270E
2,4,6-Tribromophenol (Surr)				76 %		43-140 %	1	07/23/20 17:51	EPA 8270E
DP-16W-DUP (A0G0466-44RE1)				Matrix: Water		Batch: 0070683			
Acenaphthene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Acenaphthylene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Anthracene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Benz(a)anthracene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Benzo(a)pyrene	ND	0.0144	0.0288	ug/L	1	07/23/20 18:25	EPA 8270E		
Benzo(b)fluoranthene	ND	0.0144	0.0288	ug/L	1	07/23/20 18:25	EPA 8270E		
Benzo(k)fluoranthene	ND	0.0144	0.0288	ug/L	1	07/23/20 18:25	EPA 8270E		
Benzo(g,h,i)perylene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Chrysene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Dibenz(a,h)anthracene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Fluoranthene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Fluorene	ND	0.0192	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		
Indeno(1,2,3-cd)pyrene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E		

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W-DUP (A0G0466-44RE1)				Matrix: Water		Batch: 0070683		
1-Methylnaphthalene	0.0282	0.0192	0.0385	ug/L	1	07/23/20 18:25	EPA 8270E	J
2-Methylnaphthalene	0.0379	0.0192	0.0385	ug/L	1	07/23/20 18:25	EPA 8270E	J
Naphthalene	ND	0.0192	0.0385	ug/L	1	07/23/20 18:25	EPA 8270E	
Phenanthrene	0.0147	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E	J
Pyrene	0.0175	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E	J
Carbazole	ND	0.0144	0.0288	ug/L	1	07/23/20 18:25	EPA 8270E	
Dibenzofuran	0.0110	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E	J
2-Chlorophenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
2,4-Dichlorophenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
2,4-Dimethylphenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
2,4-Dinitrophenol	ND	0.240	0.481	ug/L	1	07/23/20 18:25	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	0.240	0.481	ug/L	1	07/23/20 18:25	EPA 8270E	
2-Methylphenol	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
2-Nitrophenol	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
4-Nitrophenol	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
Phenol	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
Nitrobenzene	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
Butyl benzyl phthalate	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
Diethylphthalate	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
Dimethylphthalate	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
Di-n-butylphthalate	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
Di-n-octyl phthalate	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
N-Nitrosodimethylamine	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
N-Nitrosodiphenylamine	ND	0.0577	0.0577	ug/L	1	07/23/20 18:25	EPA 8270E	R-02

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W-DUP (A0G0466-44RE1)				Matrix: Water		Batch: 0070683		
Bis(2-Chloroethoxy) methane	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Hexachlorobenzene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E	
Hexachlorobutadiene	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
Hexachloroethane	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
2-Chloronaphthalene	ND	0.00962	0.0192	ug/L	1	07/23/20 18:25	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Aniline	ND	0.0481	0.0962	ug/L	1	07/23/20 18:25	EPA 8270E	
4-Chloroaniline	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
2-Nitroaniline	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
3-Nitroaniline	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
4-Nitroaniline	ND	0.192	0.385	ug/L	1	07/23/20 18:25	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
2,6-Dinitrotoluene	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
Benzoic acid	ND	1.20	2.40	ug/L	1	07/23/20 18:25	EPA 8270E	
Benzyl alcohol	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
Isophorone	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Azobenzene (1,2-DPH)	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	0.240	0.481	ug/L	1	07/23/20 18:25	EPA 8270E	
3,3'-Dichlorobenzidine	ND	0.481	0.962	ug/L	1	07/23/20 18:25	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	0.240	0.481	ug/L	1	07/23/20 18:25	EPA 8270E	
1,3-Dinitrobenzene	ND	0.240	0.481	ug/L	1	07/23/20 18:25	EPA 8270E	
1,4-Dinitrobenzene	ND	0.240	0.481	ug/L	1	07/23/20 18:25	EPA 8270E	
Pyridine	ND	0.0962	0.192	ug/L	1	07/23/20 18:25	EPA 8270E	
1,2-Dichlorobenzene	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
1,3-Dichlorobenzene	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
1,4-Dichlorobenzene	ND	0.0240	0.0481	ug/L	1	07/23/20 18:25	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 45 %		Limits: 44-120 %	1	07/23/20 18:25	EPA 8270E	
2-Fluorobiphenyl (Surr)		43 %		44-120 %	1	07/23/20 18:25	EPA 8270E	S-03

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Philip Nerenberg, Lab Director



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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16W-DUP (A0G0466-44RE1)		Matrix: Water			Batch: 0070683			
Surrogate: Phenol-d6 (Surr)		Recovery: 15 %	Limits: 10-133 %	1		07/23/20 18:25	EPA 8270E	
p-Terphenyl-d14 (Surr)		68 %	50-134 %	1		07/23/20 18:25	EPA 8270E	
2-Fluorophenol (Surr)		23 %	19-120 %	1		07/23/20 18:25	EPA 8270E	
2,4,6-Tribromophenol (Surr)		74 %	43-140 %	1		07/23/20 18:25	EPA 8270E	
DP-17W (A0G0466-45RE1)		Matrix: Water			Batch: 0070683			
Acenaphthene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Acenaphthylene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Benz(a)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Benzo(a)pyrene	ND	0.0142	0.0283	ug/L	1	07/23/20 19:00	EPA 8270E	
Benzo(b)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 19:00	EPA 8270E	
Benzo(k)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 19:00	EPA 8270E	
Benzo(g,h,i)perylene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Chrysene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Fluoranthene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Fluorene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 19:00	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 19:00	EPA 8270E	
Naphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 19:00	EPA 8270E	
Phenanthrene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Carbazole	ND	0.0142	0.0283	ug/L	1	07/23/20 19:00	EPA 8270E	
Dibenzofuran	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
2-Chlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
2,4-Dichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
2,4-Dimethylphenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
2,4-Dinitrophenol	ND	0.236	0.472	ug/L	1	07/23/20 19:00	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	0.236	0.472	ug/L	1	07/23/20 19:00	EPA 8270E	
2-Methylphenol	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17W (A0G0466-45RE1)				Matrix: Water		Batch: 0070683		
2-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
4-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
Phenol	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
Nitrobenzene	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
Butyl benzyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
Diethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
Dimethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
Di-n-butylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
Di-n-octyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
N-Nitrosodimethylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
N-Nitrosodiphenylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Hexachlorobenzene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
Hexachlorobutadiene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
Hexachloroethane	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
2-Chloronaphthalene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:00	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Aniline	ND	0.0472	0.0943	ug/L	1	07/23/20 19:00	EPA 8270E	
4-Chloroaniline	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
2-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
3-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17W (A0G0466-45RE1)		Matrix: Water			Batch: 0070683			
4-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 19:00	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
2,6-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
Benzoic acid	ND	1.18	2.36	ug/L	1	07/23/20 19:00	EPA 8270E	
Benzyl alcohol	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
Isophorone	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Azobenzene (1,2-DPH)	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	0.236	0.472	ug/L	1	07/23/20 19:00	EPA 8270E	
3,3'-Dichlorobenzidine	ND	0.472	0.943	ug/L	1	07/23/20 19:00	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 19:00	EPA 8270E	
1,3-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 19:00	EPA 8270E	
1,4-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 19:00	EPA 8270E	
Pyridine	ND	0.0943	0.189	ug/L	1	07/23/20 19:00	EPA 8270E	
1,2-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
1,3-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
1,4-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:00	EPA 8270E	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i> 44 %		<i>Limits:</i> 44-120 %	1	07/23/20 19:00	EPA 8270E	
<i>2-Fluorobiphenyl (Surr)</i>		42 %		44-120 %	1	07/23/20 19:00	EPA 8270E	S-03
<i>Phenol-d6 (Surr)</i>		14 %		10-133 %	1	07/23/20 19:00	EPA 8270E	
<i>p-Terphenyl-d14 (Surr)</i>		75 %		50-134 %	1	07/23/20 19:00	EPA 8270E	
<i>2-Fluorophenol (Surr)</i>		23 %		19-120 %	1	07/23/20 19:00	EPA 8270E	
<i>2,4,6-Tribromophenol (Surr)</i>		76 %		43-140 %	1	07/23/20 19:00	EPA 8270E	

DP-18W (A0G0466-46RE1)		Matrix: Water			Batch: 0070683			
Acenaphthene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Acenaphthylene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Benz(a)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Benzo(a)pyrene	ND	0.0142	0.0283	ug/L	1	07/23/20 19:34	EPA 8270E	
Benzo(b)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 19:34	EPA 8270E	
Benzo(k)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 19:34	EPA 8270E	
Benzo(g,h,i)perylene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Chrysene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	

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Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46RE1)				Matrix: Water		Batch: 0070683		
Fluoranthene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Fluorene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 19:34	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 19:34	EPA 8270E	
Naphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 19:34	EPA 8270E	
Phenanthrene	0.0106	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	J
Pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Carbazole	ND	0.0142	0.0283	ug/L	1	07/23/20 19:34	EPA 8270E	
Dibenzofuran	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
2-Chlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
2,4-Dichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
2,4-Dimethylphenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
2,4-Dinitrophenol	ND	0.236	0.472	ug/L	1	07/23/20 19:34	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	0.236	0.472	ug/L	1	07/23/20 19:34	EPA 8270E	
2-Methylphenol	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
2-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
4-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
Phenol	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
Nitrobenzene	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
Butyl benzyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
Diethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
Dimethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
Di-n-butylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
Di-n-octyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46RE1)				Matrix: Water		Batch: 0070683		
N-Nitrosodimethylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
N-Nitrosodiphenylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Hexachlorobenzene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
Hexachlorobutadiene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
Hexachloroethane	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
2-Chloronaphthalene	ND	0.00943	0.0189	ug/L	1	07/23/20 19:34	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Aniline	ND	0.0472	0.0943	ug/L	1	07/23/20 19:34	EPA 8270E	
4-Chloroaniline	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
2-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
3-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
4-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 19:34	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
2,6-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
Benzoic acid	ND	1.18	2.36	ug/L	1	07/23/20 19:34	EPA 8270E	
Benzyl alcohol	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
Isophorone	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Azobenzene (1,2-DPH)	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	0.236	0.472	ug/L	1	07/23/20 19:34	EPA 8270E	
3,3'-Dichlorobenzidine	ND	0.472	0.943	ug/L	1	07/23/20 19:34	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 19:34	EPA 8270E	
1,3-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 19:34	EPA 8270E	
1,4-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 19:34	EPA 8270E	
Pyridine	ND	0.0943	0.189	ug/L	1	07/23/20 19:34	EPA 8270E	
1,2-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
1,3-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46RE1)				Matrix: Water		Batch: 0070683		
1,4-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 19:34	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 48 %		Limits: 44-120 %	1	07/23/20 19:34	EPA 8270E	
2-Fluorobiphenyl (Surr)		47 %		44-120 %	1	07/23/20 19:34	EPA 8270E	
Phenol-d6 (Surr)		16 %		10-133 %	1	07/23/20 19:34	EPA 8270E	
p-Terphenyl-d14 (Surr)		77 %		50-134 %	1	07/23/20 19:34	EPA 8270E	
2-Fluorophenol (Surr)		25 %		19-120 %	1	07/23/20 19:34	EPA 8270E	
2,4,6-Tribromophenol (Surr)		75 %		43-140 %	1	07/23/20 19:34	EPA 8270E	
DP-19W (A0G0466-47RE2)				Matrix: Water		Batch: 0070683		
Acenaphthene	0.0124	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	J
Acenaphthylene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Anthracene	0.0239	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Benz(a)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Benzo(a)pyrene	ND	0.0142	0.0283	ug/L	1	07/23/20 20:09	EPA 8270E	
Benzo(b)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 20:09	EPA 8270E	
Benzo(k)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/23/20 20:09	EPA 8270E	
Benzo(g,h,i)perylene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Chrysene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Fluoranthene	0.0488	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Fluorene	0.0124	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	J
Indeno(1,2,3-cd)pyrene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 20:09	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 20:09	EPA 8270E	
Naphthalene	ND	0.0189	0.0377	ug/L	1	07/23/20 20:09	EPA 8270E	
Phenanthrene	0.107	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Pyrene	0.0499	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Carbazole	0.0194	0.0142	0.0283	ug/L	1	07/23/20 20:09	EPA 8270E	J
Dibenzofuran	0.00971	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	J
2-Chlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
4-Chloro-3-methylphenol	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
2,4-Dichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
2,4-Dimethylphenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
2,4-Dinitrophenol	ND	0.236	0.472	ug/L	1	07/23/20 20:09	EPA 8270E	

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Philip Nerenberg, Lab Director

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19W (A0G0466-47RE2)				Matrix: Water		Batch: 0070683		
4,6-Dinitro-2-methylphenol	ND	0.236	0.472	ug/L	1	07/23/20 20:09	EPA 8270E	
2-Methylphenol	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
3+4-Methylphenol(s)	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
2-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
4-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
Pentachlorophenol (PCP)	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
Phenol	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
2,4,5-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
Nitrobenzene	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
2,4,6-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
Butyl benzyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
Diethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
Dimethylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
Di-n-butylphthalate	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
Di-n-octyl phthalate	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
N-Nitrosodimethylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
N-Nitrosodiphenylamine	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Bis(2-Chloroethoxy) methane	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Hexachlorobenzene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
Hexachlorobutadiene	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Hexachlorocyclopentadiene	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	
Hexachloroethane	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
2-Chloronaphthalene	ND	0.00943	0.0189	ug/L	1	07/23/20 20:09	EPA 8270E	
1,2,4-Trichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
4-Bromophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Aniline	ND	0.0472	0.0943	ug/L	1	07/23/20 20:09	EPA 8270E	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270E**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-19W (A0G0466-47RE2)		Matrix: Water			Batch: 0070683			
4-Chloroaniline	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
2-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
3-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
4-Nitroaniline	ND	0.189	0.377	ug/L	1	07/23/20 20:09	EPA 8270E	
2,4-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
2,6-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
Benzoic acid	ND	1.18	2.36	ug/L	1	07/23/20 20:09	EPA 8270E	
Benzyl alcohol	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
Isophorone	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Azobenzene (1,2-DPH)	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	0.236	0.472	ug/L	1	07/23/20 20:09	EPA 8270E	
3,3'-Dichlorobenzidine	ND	0.472	0.943	ug/L	1	07/23/20 20:09	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 20:09	EPA 8270E	
1,3-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 20:09	EPA 8270E	
1,4-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/23/20 20:09	EPA 8270E	
Pyridine	ND	0.0943	0.189	ug/L	1	07/23/20 20:09	EPA 8270E	
1,2-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
1,3-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
1,4-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/23/20 20:09	EPA 8270E	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	<i>44 %</i>	<i>Limits:</i>	<i>44-120 %</i>	<i>1</i>	<i>07/23/20 20:09</i>	<i>EPA 8270E</i>
<i>2-Fluorobiphenyl (Surr)</i>			<i>42 %</i>		<i>44-120 %</i>	<i>1</i>	<i>07/23/20 20:09</i>	<i>EPA 8270E</i>
<i>Phenol-d6 (Surr)</i>			<i>14 %</i>		<i>10-133 %</i>	<i>1</i>	<i>07/23/20 20:09</i>	<i>EPA 8270E</i>
<i>p-Terphenyl-d14 (Surr)</i>			<i>69 %</i>		<i>50-134 %</i>	<i>1</i>	<i>07/23/20 20:09</i>	<i>EPA 8270E</i>
<i>2-Fluorophenol (Surr)</i>			<i>23 %</i>		<i>19-120 %</i>	<i>1</i>	<i>07/23/20 20:09</i>	<i>EPA 8270E</i>
<i>2,4,6-Tribromophenol (Surr)</i>			<i>71 %</i>		<i>43-140 %</i>	<i>1</i>	<i>07/23/20 20:09</i>	<i>EPA 8270E</i>

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01) Matrix: Soil								
Batch: 0070667								
Antimony	1.76	0.613	1.23	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Arsenic	21.0	0.613	1.23	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Barium	117	0.613	1.23	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Cadmium	0.985	0.123	0.245	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Chromium	50.8	0.613	1.23	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Copper	878	1.23	2.45	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Lead	194	0.123	0.245	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Selenium	ND	0.613	1.23	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
Silver	0.133	0.123	0.245	mg/kg dry	10	07/23/20 15:07	EPA 6020A	J
Zinc	609	2.45	4.90	mg/kg dry	10	07/23/20 15:07	EPA 6020A	
DP-14(0.5-1.5) (A0G0466-01RE1) Matrix: Soil								
Batch: 0070667								
Mercury	4.94	0.0981	0.196	mg/kg dry	20	07/23/20 15:21	EPA 6020A	
DP-14(1.5-2.5) (A0G0466-02) Matrix: Soil								
Batch: 0070667								
Antimony	ND	0.588	1.18	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Arsenic	1.91	0.588	1.18	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Barium	52.5	0.588	1.18	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Cadmium	ND	0.118	0.235	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Chromium	10.9	0.588	1.18	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Copper	11.5	1.18	2.35	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Lead	2.17	0.118	0.235	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Mercury	ND	0.0470	0.0941	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Selenium	ND	0.588	1.18	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Silver	ND	0.118	0.235	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
Zinc	33.3	2.35	4.70	mg/kg dry	10	07/23/20 15:13	EPA 6020A	
DP-15(1-2) (A0G0466-07) Matrix: Soil								
Batch: 0070667								
Antimony	7.02	0.582	1.16	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
Arsenic	123	0.582	1.16	mg/kg dry	10	07/23/20 15:26	EPA 6020A	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-15(1-2) (A0G0466-07)				Matrix: Soil				
Barium	120	0.582	1.16	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
Cadmium	1.06	0.116	0.233	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
Chromium	140	0.582	1.16	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
Selenium	ND	0.582	1.16	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
Silver	0.246	0.116	0.233	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
Zinc	1460	2.33	4.65	mg/kg dry	10	07/23/20 15:26	EPA 6020A	
DP-15(1-2) (A0G0466-07RE1)				Matrix: Soil				
Batch: 0070667								
Copper	4420	11.6	23.3	mg/kg dry	100	07/23/20 16:03	EPA 6020A	
Lead	1180	1.16	2.33	mg/kg dry	100	07/23/20 16:03	EPA 6020A	
Mercury	26.1	0.465	0.930	mg/kg dry	100	07/23/20 16:03	EPA 6020A	
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil				
Batch: 0070667								
Antimony	ND	0.540	1.08	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Arsenic	2.68	0.540	1.08	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Barium	61.4	0.540	1.08	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Cadmium	ND	0.108	0.216	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Chromium	11.7	0.540	1.08	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Copper	15.0	1.08	2.16	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Lead	2.85	0.108	0.216	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Selenium	ND	0.540	1.08	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Silver	ND	0.108	0.216	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
Zinc	39.5	2.16	4.32	mg/kg dry	10	07/23/20 15:31	EPA 6020A	
DP-15(2.5-3.5) (A0G0466-08RE1)				Matrix: Soil				
Batch: 0070667								
Lead	2.70	0.108	0.216	mg/kg dry	10	07/23/20 16:08	EPA 6020A	
Mercury	0.0561	0.0432	0.0863	mg/kg dry	10	07/23/20 16:08	EPA 6020A	J
DP-16(6-7) (A0G0466-13)				Matrix: Soil				
Batch: 0070667								
Antimony	ND	0.527	1.05	mg/kg dry	10	07/23/20 16:13	EPA 6020A	

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-16(6-7) (A0G0466-13) Matrix: Soil								
Arsenic	2.63	0.527	1.05	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Barium	77.9	0.527	1.05	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Cadmium	ND	0.105	0.211	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Chromium	13.0	0.527	1.05	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Copper	14.8	1.05	2.11	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Lead	2.52	0.105	0.211	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Mercury	0.0444	0.0421	0.0843	mg/kg dry	10	07/23/20 16:13	EPA 6020A	J
Selenium	ND	0.527	1.05	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Silver	ND	0.105	0.211	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
Zinc	42.1	2.11	4.21	mg/kg dry	10	07/23/20 16:13	EPA 6020A	
DP-17(0.5-1.5) (A0G0466-18) Matrix: Soil								
Batch: 0070667								
Antimony	ND	0.618	1.24	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Arsenic	3.37	0.618	1.24	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Barium	144	0.618	1.24	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Cadmium	ND	0.124	0.247	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Chromium	25.4	0.618	1.24	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Copper	44.1	1.24	2.47	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Lead	10.7	0.124	0.247	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Mercury	0.158	0.0494	0.0989	mg/kg dry	10	07/23/20 16:18	EPA 6020A	B-02
Selenium	ND	0.618	1.24	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Silver	ND	0.124	0.247	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
Zinc	65.5	2.47	4.94	mg/kg dry	10	07/23/20 16:18	EPA 6020A	
DP-17(2-3) (A0G0466-19) Matrix: Soil								
Batch: 0070667								
Antimony	ND	0.627	1.25	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Arsenic	2.99	0.627	1.25	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Barium	150	0.627	1.25	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Cadmium	ND	0.125	0.251	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Chromium	23.1	0.627	1.25	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Copper	23.8	1.25	2.51	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Lead	4.21	0.125	0.251	mg/kg dry	10	07/23/20 16:23	EPA 6020A	

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503-718-2323
ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17(2-3) (A0G0466-19) Matrix: Soil								
Mercury	0.0650	0.0502	0.100	mg/kg dry	10	07/23/20 16:23	EPA 6020A	J
Selenium	ND	0.627	1.25	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Silver	ND	0.125	0.251	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
Zinc	53.6	2.51	5.02	mg/kg dry	10	07/23/20 16:23	EPA 6020A	
DP-18(2-3) (A0G0466-24) Matrix: Soil								
Batch: 0070667								
Antimony	ND	0.666	1.33	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Arsenic	4.19	0.666	1.33	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Barium	151	0.666	1.33	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Cadmium	ND	0.133	0.266	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Chromium	21.9	0.666	1.33	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Copper	21.9	1.33	2.66	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Lead	4.65	0.133	0.266	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Mercury	0.0615	0.0533	0.107	mg/kg dry	10	07/23/20 16:29	EPA 6020A	J
Selenium	ND	0.666	1.33	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Silver	ND	0.133	0.266	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
Zinc	55.9	2.66	5.33	mg/kg dry	10	07/23/20 16:29	EPA 6020A	
DP-19(0.5-1.5) (A0G0466-30) Matrix: Soil								
Batch: 0070667								
Antimony	ND	0.592	1.18	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Arsenic	3.09	0.592	1.18	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Barium	87.8	0.592	1.18	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Cadmium	ND	0.118	0.237	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Chromium	17.2	0.592	1.18	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Copper	20.2	1.18	2.37	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Lead	3.48	0.118	0.237	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Mercury	0.0529	0.0474	0.0947	mg/kg dry	10	07/23/20 16:34	EPA 6020A	J
Selenium	ND	0.592	1.18	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Silver	ND	0.118	0.237	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
Zinc	46.3	2.37	4.74	mg/kg dry	10	07/23/20 16:34	EPA 6020A	
DP-14W (A0G0466-41) Matrix: Water								

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41) Matrix: Water								
Batch: 0070702								
Arsenic	1.33	0.500	1.00	ug/L	1	07/24/20 05:28	EPA 6020A	
Cadmium	ND	0.100	0.200	ug/L	1	07/24/20 05:28	EPA 6020A	
Copper	5.62	1.00	2.00	ug/L	1	07/24/20 05:28	EPA 6020A	
Lead	0.584	0.100	0.200	ug/L	1	07/24/20 05:28	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/24/20 05:28	EPA 6020A	
DP-14W (A0G0466-41RE1) Matrix: Water								
Batch: 0070702								
Zinc	6.56	2.00	4.00	ug/L	1	08/10/20 11:50	EPA 6020A	
DP-15W (A0G0466-42) Matrix: Water								
Batch: 0070702								
Arsenic	1.42	0.500	1.00	ug/L	1	07/24/20 05:33	EPA 6020A	
Cadmium	ND	0.100	0.200	ug/L	1	07/24/20 05:33	EPA 6020A	
Copper	1.39	1.00	2.00	ug/L	1	07/24/20 05:33	EPA 6020A	J
Lead	ND	0.100	0.200	ug/L	1	07/24/20 05:33	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/24/20 05:33	EPA 6020A	
DP-15W (A0G0466-42RE1) Matrix: Water								
Batch: 0070702								
Zinc	4.49	2.00	4.00	ug/L	1	08/10/20 11:55	EPA 6020A	
DP-16W (A0G0466-43) Matrix: Water								
Batch: 0070702								
Arsenic	ND	0.500	1.00	ug/L	1	07/24/20 05:39	EPA 6020A	
Copper	ND	1.00	2.00	ug/L	1	07/24/20 05:39	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	07/24/20 05:39	EPA 6020A	
DP-16W-DUP (A0G0466-44) Matrix: Water								
Batch: 0070702								
Arsenic	ND	0.500	1.00	ug/L	1	07/24/20 05:44	EPA 6020A	
Copper	1.09	1.00	2.00	ug/L	1	07/24/20 05:44	EPA 6020A	J
Lead	ND	0.100	0.200	ug/L	1	07/24/20 05:44	EPA 6020A	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-17W (A0G0466-45) Matrix: Water								
Batch: 0070702								
Arsenic	0.831	0.500	1.00	ug/L	1	07/24/20 05:49	EPA 6020A	J
Copper	ND	1.00	2.00	ug/L	1	07/24/20 05:49	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	07/24/20 05:49	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/24/20 05:49	EPA 6020A	
DP-18W (A0G0466-46) Matrix: Water								
Batch: 0070702								
Arsenic	ND	0.500	1.00	ug/L	1	07/24/20 06:05	EPA 6020A	
Cadmium	ND	0.100	0.200	ug/L	1	07/24/20 06:05	EPA 6020A	
Copper	ND	1.00	2.00	ug/L	1	07/24/20 06:05	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	07/24/20 06:05	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/24/20 06:05	EPA 6020A	
DP-18W (A0G0466-46RE1) Matrix: Water								
Batch: 0070702								
Zinc	ND	2.00	4.00	ug/L	1	08/10/20 12:00	EPA 6020A	
DP-19W (A0G0466-47) Matrix: Water								
Batch: 0070702								
Arsenic	0.924	0.500	1.00	ug/L	1	07/24/20 06:11	EPA 6020A	J
Copper	2.07	1.00	2.00	ug/L	1	07/24/20 06:11	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	07/24/20 06:11	EPA 6020A	

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Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

ANALYTICAL SAMPLE RESULTS**Dissolved Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14W (A0G0466-41) Matrix: Water								
Batch: 0070665								
Arsenic	1.06	0.500	1.00	ug/L	1	07/22/20 14:45	EPA 6020A (Diss)	
Copper	ND	1.00	2.00	ug/L	1	07/22/20 14:45	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	07/22/20 14:45	EPA 6020A (Diss)	
Mercury	ND	0.0400	0.0800	ug/L	1	07/22/20 14:45	EPA 6020A (Diss)	
DP-15W (A0G0466-42) Matrix: Water								
Batch: 0070665								
Arsenic	1.64	0.500	1.00	ug/L	1	07/22/20 14:51	EPA 6020A (Diss)	
Copper	ND	1.00	2.00	ug/L	1	07/22/20 14:51	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	07/22/20 14:51	EPA 6020A (Diss)	
Mercury	ND	0.0400	0.0800	ug/L	1	07/22/20 14:51	EPA 6020A (Diss)	
DP-16W (A0G0466-43) Matrix: Water								
Batch: 0070665								
Arsenic	ND	0.500	1.00	ug/L	1	07/22/20 14:56	EPA 6020A (Diss)	
Copper	1.08	1.00	2.00	ug/L	1	07/22/20 14:56	EPA 6020A (Diss)	J
Lead	ND	0.100	0.200	ug/L	1	07/22/20 14:56	EPA 6020A (Diss)	
DP-16W-DUP (A0G0466-44) Matrix: Water								
Batch: 0070665								
Arsenic	ND	0.500	1.00	ug/L	1	07/22/20 15:01	EPA 6020A (Diss)	
Copper	ND	1.00	2.00	ug/L	1	07/22/20 15:01	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	07/22/20 15:01	EPA 6020A (Diss)	
DP-16W-DUP (A0G0466-44RE1) Matrix: Water								
Batch: 0070665								
Zinc	ND	2.00	4.00	ug/L	1	07/23/20 12:32	EPA 6020A (Diss)	
DP-17W (A0G0466-45) Matrix: Water								
Batch: 0070665								
Arsenic	0.873	0.500	1.00	ug/L	1	07/22/20 15:17	EPA 6020A (Diss)	J
Copper	ND	1.00	2.00	ug/L	1	07/22/20 15:17	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	07/22/20 15:17	EPA 6020A (Diss)	

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Wilsonville, OR 97070

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Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

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ANALYTICAL SAMPLE RESULTS**Dissolved Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-18W (A0G0466-46)				Matrix: Water				
Batch: 0070665								
Arsenic	ND	0.500	1.00	ug/L	1	07/22/20 15:22	EPA 6020A (Diss)	
Copper	ND	1.00	2.00	ug/L	1	07/22/20 15:22	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	07/22/20 15:22	EPA 6020A (Diss)	
Mercury	ND	0.0400	0.0800	ug/L	1	07/22/20 15:22	EPA 6020A (Diss)	
DP-19W (A0G0466-47)				Matrix: Water				
Batch: 0070665								
Arsenic	1.00	0.500	1.00	ug/L	1	07/22/20 15:27	EPA 6020A (Diss)	
Copper	ND	1.00	2.00	ug/L	1	07/22/20 15:27	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	07/22/20 15:27	EPA 6020A (Diss)	

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Project Manager: **Kyle Haggart**

Report ID:

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ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-14(0.5-1.5) (A0G0466-01)				Matrix: Soil		Batch: 0070555		
% Solids	88.5	1.00	1.00	%	1	07/21/20 08:51	EPA 8000D	
DP-14(1.5-2.5) (A0G0466-02)				Matrix: Soil		Batch: 0070604		
% Solids	88.2	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-15(1-2) (A0G0466-07)				Matrix: Soil		Batch: 0070604		
% Solids	87.9	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-15(2.5-3.5) (A0G0466-08)				Matrix: Soil		Batch: 0070604		
% Solids	93.2	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-16(6-7) (A0G0466-13)				Matrix: Soil		Batch: 0070604		
% Solids	93.3	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-17(0.5-1.5) (A0G0466-18)				Matrix: Soil		Batch: 0070604		
% Solids	82.9	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-17(2-3) (A0G0466-19)				Matrix: Soil		Batch: 0070604		
% Solids	80.1	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-18(2-3) (A0G0466-24)				Matrix: Soil		Batch: 0070604		
% Solids	79.0	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	
DP-19(0.5-1.5) (A0G0466-30)				Matrix: Soil		Batch: 0070604		
% Solids	83.5	1.00	1.00	%	1	07/22/20 09:16	EPA 8000D	

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**
Project Number: **BCSAmerica-1-01-03**
Project Manager: **Kyle Haggart**

Report ID:
A0G0466 - 08 18 20 1602

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 0070652 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (0070652-BLK1)			Prepared: 07/22/20 11:02 Analyzed: 07/22/20 21:51									
NWTPH-Dx												
Diesel	ND	0.0909	0.182	mg/L	1	---	---	---	---	---	---	
Oil	ND	0.182	0.364	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 90 %		Limits: 50-150 %		Dilution: 1x						
LCS (0070652-BS1)			Prepared: 07/22/20 11:02 Analyzed: 07/22/20 22:14									
NWTPH-Dx												
Diesel	1.06	0.100	0.200	mg/L	1	1.25	---	85	59-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (0070652-BSD1)			Prepared: 07/22/20 11:02 Analyzed: 07/22/20 22:37									Q-19
NWTPH-Dx												
Diesel	1.03	0.100	0.200	mg/L	1	1.25	---	82	59-115%	3	30%	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
Batch 0070663 - EPA 3546 (Fuels)						Soil						
Blank (0070663-BLK1)			Prepared: 07/22/20 12:44 Analyzed: 07/22/20 22:00									
NWTPH-Dx												
Diesel	ND	9.09	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	18.2	50.0	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	18.2	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
LCS (0070663-BS1)			Prepared: 07/22/20 12:44 Analyzed: 07/22/20 22:21									
NWTPH-Dx												
Diesel	118	10.0	25.0	mg/kg wet	1	125	---	94	73-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (0070663-DUP2)			Prepared: 07/22/20 12:44 Analyzed: 07/23/20 01:42									
QC Source Sample: Non-SDG (A0G0544-05)												
Diesel	1160	12.3	25.0	mg/kg dry	1	---	1270	---	---	9	30%	
Oil	ND	24.7	50.0	mg/kg dry	1	---	ND	---	---	---	30%	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070663 - EPA 3546 (Fuels)						Soil						
Duplicate (0070663-DUP2)			Prepared: 07/22/20 12:44		Analyzed: 07/23/20 01:42							
QC Source Sample: Non-SDG (A0G0544-05)												
Mineral Oil	ND	24.7	49.3	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 89 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (0070663-DUP3)			Prepared: 07/22/20 12:44		Analyzed: 07/23/20 07:54							
QC Source Sample: Non-SDG (A0G0256-12RE1)												
Diesel	ND	251	502	mg/kg dry	25	---	ND	---	---	---	30%	
Oil	13800	502	1000	mg/kg dry	25	---	14000	---	---	2	30%	F-13
Mineral Oil	ND	502	1000	mg/kg dry	25	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: %		Limits: 50-150 %		Dilution: 25x					S-01	

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Project Manager: **Kyle Haggart**

Report ID:

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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 0070556 - EPA 5035A						Soil						
Blank (0070556-BLK1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 12:31							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 90 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		102 %		50-150 %		"						
LCS (0070556-BS2)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 12:04							
NWTPH-Gx (MS)												
Gasoline Range Organics	23.7	2.50	5.00	mg/kg wet	50	25.0	---	95	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 87 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		101 %		50-150 %		"						
Duplicate (0070556-DUP1)			Prepared: 07/16/20 09:15		Analyzed: 07/20/20 13:25							
QC Source Sample: Non-SDG (A0G0456-01)												
Gasoline Range Organics	ND	3.02	6.04	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 90 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"						
Duplicate (0070556-DUP2)			Prepared: 07/16/20 07:30		Analyzed: 07/20/20 19:18							
QC Source Sample: DP-14(0.5-1.5) (A0G0466-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	36.7	3.42	6.85	mg/kg dry	50	---	ND	---	---		30%	Q-04
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"						

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070574 - EPA 5035A						Soil						
Blank (0070574-BLK1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 15:02							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						
LCS (0070574-BS2)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 14:35							
NWTPH-Gx (MS)												
Gasoline Range Organics	23.5	2.50	5.00	mg/kg wet	50	25.0	---	94	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						
Duplicate (0070574-DUP1)			Prepared: 07/16/20 11:35		Analyzed: 07/21/20 00:07							
QC Source Sample: DP-16(6-7) (A0G0466-13)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	2.91	5.81	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		110 %		50-150 %		"						
Duplicate (0070574-DUP2)			Prepared: 07/16/20 12:50		Analyzed: 07/21/20 01:01							
QC Source Sample: DP-17(0.5-1.5) (A0G0466-18)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	3.44	6.89	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		108 %		50-150 %		"						

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Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070607 - EPA 5035A						Soil						
Blank (0070607-BLK1)			Prepared: 07/21/20 09:00 Analyzed: 07/21/20 11:40									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		108 %		50-150 %		"						
LCS (0070607-BS2)			Prepared: 07/21/20 09:00 Analyzed: 07/21/20 11:13									
NWTPH-Gx (MS)												
Gasoline Range Organics	26.0	2.50	5.00	mg/kg wet	50	25.0	---	104	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		104 %		50-150 %		"						
Duplicate (0070607-DUP1)			Prepared: 07/16/20 17:00 Analyzed: 07/21/20 15:17									
QC Source Sample: DP-19(0.5-1.5) (A0G0466-30)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	3.06	6.13	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		100 %		50-150 %		"						

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070681 - EPA 5030B						Water						
Blank (0070681-BLK1)			Prepared: 07/22/20 20:07 Analyzed: 07/22/20 22:18									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						
LCS (0070681-BS2)			Prepared: 07/22/20 20:07 Analyzed: 07/22/20 21:51									
NWTPH-Gx (MS)												
Gasoline Range Organics	0.510	0.0500	0.100	mg/L	1	0.500	---	102	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		102 %		50-150 %		"						
Duplicate (0070681-DUP1)			Prepared: 07/22/20 20:07 Analyzed: 07/23/20 03:43									
QC Source Sample: Non-SDG (A0G0490-10)												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		104 %		50-150 %		"						

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070692 - EPA 5030B						Water						
Blank (0070692-BLK1)			Prepared: 07/23/20 08:00 Analyzed: 07/23/20 13:12									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		103 %		50-150 %		"						
LCS (0070692-BS1)			Prepared: 07/23/20 08:00 Analyzed: 07/23/20 11:50									
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	0.492	0.0500	0.100	mg/L	1	0.500	---	98	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
Duplicate (0070692-DUP1)			Prepared: 07/23/20 10:53 Analyzed: 07/23/20 16:49									
<u>QC Source Sample: DP-16W-DUP (A0G0466-44)</u>												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		104 %		50-150 %		"						

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
Blank (0070556-BLK1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 12:31							
5035A/8260D												
Acetone	ND	333	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	3.33	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	333	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070556 - EPA 5035A						Soil						
Blank (0070556-BLK1)						Prepared: 07/20/20 09:00 Analyzed: 07/20/20 12:31						
1,2-Dichloropropane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 97 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
Blank (0070556-BLK1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 12:31							
Surr: Toluene-d8 (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		99 %		79-120 %		"						
LCS (0070556-BS1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 11:37							
5035A/8260D												
Acetone	2150	500	1000	ug/kg wet	50	2000	---	107	80-120%	---	---	
Acrylonitrile	1070	50.0	100	ug/kg wet	50	1000	---	107	80-120%	---	---	
Benzene	1050	5.00	10.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Bromobenzene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Bromochloromethane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Bromodichloromethane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Bromoform	888	50.0	100	ug/kg wet	50	1000	---	89	80-120%	---	---	
Bromomethane	1260	500	500	ug/kg wet	50	1000	---	126	80-120%	---	---	Q-56
2-Butanone (MEK)	2170	250	500	ug/kg wet	50	2000	---	109	80-120%	---	---	
n-Butylbenzene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
sec-Butylbenzene	1150	25.0	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
tert-Butylbenzene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Carbon disulfide	1430	250	500	ug/kg wet	50	1000	---	143	80-120%	---	---	Q-56
Carbon tetrachloride	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Chlorobenzene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Chloroethane	985	250	500	ug/kg wet	50	1000	---	99	80-120%	---	---	
Chloroform	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Chloromethane	1090	125	250	ug/kg wet	50	1000	---	109	80-120%	---	---	
2-Chlorotoluene	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
4-Chlorotoluene	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Dibromochloromethane	1010	50.0	100	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,2-Dibromo-3-chloropropane	910	125	250	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,2-Dibromoethane (EDB)	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Dibromomethane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,2-Dichlorobenzene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,4-Dichlorobenzene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Dichlorodifluoromethane	1510	50.0	100	ug/kg wet	50	1000	---	151	80-120%	---	---	Q-56
1,1-Dichloroethane	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
LCS (0070556-BS1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 11:37							
1,2-Dichloroethane (EDC)	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	Q-56
1,1-Dichloroethene	1230	12.5	25.0	ug/kg wet	50	1000	---	123	80-120%	---	---	
cis-1,2-Dichloroethene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
trans-1,2-Dichloroethene	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,2-Dichloropropane	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,3-Dichloropropane	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
2,2-Dichloropropane	1190	25.0	50.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
1,1-Dichloropropene	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
cis-1,3-Dichloropropene	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
trans-1,3-Dichloropropene	1190	25.0	50.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
Ethylbenzene	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Hexachlorobutadiene	982	50.0	100	ug/kg wet	50	1000	---	98	80-120%	---	---	
2-Hexanone	1980	250	500	ug/kg wet	50	2000	---	99	80-120%	---	---	
Isopropylbenzene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
4-Isopropyltoluene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Methylene chloride	1080	250	500	ug/kg wet	50	1000	---	108	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2110	250	500	ug/kg wet	50	2000	---	105	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	967	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Naphthalene	989	50.0	100	ug/kg wet	50	1000	---	99	80-120%	---	---	
n-Propylbenzene	1120	12.5	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Styrene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1170	12.5	25.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Tetrachloroethene (PCE)	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Toluene	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2,3-Trichlorobenzene	997	125	250	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	982	125	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,1,1-Trichloroethane	1150	12.5	25.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
1,1,2-Trichloroethane	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Trichloroethene (TCE)	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Trichlorofluoromethane	1060	50.0	100	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2,3-Trichloropropane	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2,4-Trimethylbenzene	1130	25.0	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
1,3,5-Trimethylbenzene	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
LCS (0070556-BS1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 11:37							
Vinyl chloride	1140	12.5	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
m,p-Xylene	2220	25.0	50.0	ug/kg wet	50	2000	---	111	80-120%	---	---	
o-Xylene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		102 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		79-120 %		"						

Duplicate (0070556-DUP1)

Prepared: 07/16/20 09:15 Analyzed: 07/20/20 13:25

QC Source Sample: Non-SDG (A0G0456-01)

Acetone	ND	604	1210	ug/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	6.04	12.1	ug/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	604	604	ug/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	302	604	ug/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	302	604	ug/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	302	604	ug/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	151	302	ug/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	151	302	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%

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Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070556 - EPA 5035A						Soil						
Duplicate (0070556-DUP1)			Prepared: 07/16/20 09:15 Analyzed: 07/20/20 13:25									
QC Source Sample: Non-SDG (A0G0456-01)												
1,3-Dichlorobenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	302	604	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	302	604	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	302	604	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	151	302	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	151	302	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070556 - EPA 5035A						Soil						
Duplicate (0070556-DUP1)			Prepared: 07/16/20 09:15		Analyzed: 07/20/20 13:25							
QC Source Sample: Non-SDG (A0G0456-01)												
Trichloroethene (TCE)	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	60.4	121	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	30.2	60.4	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	15.1	30.2	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		104 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		79-120 %		"						

Duplicate (0070556-DUP2) Prepared: 07/16/20 07:30 Analyzed: 07/20/20 19:18

QC Source Sample: DP-14(0.5-1.5) (A0G0466-01)

5035A/8260D

Acetone	ND	685	1370	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	6.85	13.7	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	685	685	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	342	685	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	342	685	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	342	685	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	171	342	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
Duplicate (0070556-DUP2)			Prepared: 07/16/20 07:30 Analyzed: 07/20/20 19:18									
QC Source Sample: DP-14(0.5-1.5) (A0G0466-01)												
2-Chlorotoluene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	171	342	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	342	685	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	342	685	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	685	685	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
Duplicate (0070556-DUP2)			Prepared: 07/16/20 07:30		Analyzed: 07/20/20 19:18							
QC Source Sample: DP-14(0.5-1.5) (A0G0466-01)												
1,1,2,2-Tetrachloroethane	ND	257	257	ug/kg dry	50	---	ND	---	---	---	30%	R-02
Tetrachloroethene (PCE)	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	171	342	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	171	342	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	68.5	137	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	34.2	68.5	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	17.1	34.2	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		79-120 %		"						

Matrix Spike (0070556-MS1)

Prepared: 07/16/20 10:24 Analyzed: 07/20/20 15:13

QC Source Sample: Non-SDG (A0G0456-04)**5035A/8260D**

Acetone	3520	721	1440	ug/kg dry	50	2880	ND	122	36-164%	---	---	Q-54i
Acrylonitrile	1650	72.1	144	ug/kg dry	50	1440	ND	115	65-134%	---	---	
Benzene	1430	7.21	14.4	ug/kg dry	50	1440	ND	99	77-121%	---	---	
Bromobenzene	1440	18.0	36.1	ug/kg dry	50	1440	ND	100	78-121%	---	---	
Bromochloromethane	1560	36.1	72.1	ug/kg dry	50	1440	ND	109	78-125%	---	---	
Bromodichloromethane	1550	36.1	72.1	ug/kg dry	50	1440	ND	107	75-127%	---	---	
Bromoform	1310	72.1	144	ug/kg dry	50	1440	ND	91	67-132%	---	---	
Bromomethane	1820	721	721	ug/kg dry	50	1440	ND	126	53-143%	---	---	
2-Butanone (MEK)	3370	361	721	ug/kg dry	50	2880	ND	117	51-148%	---	---	
n-Butylbenzene	1490	36.1	72.1	ug/kg dry	50	1440	ND	103	70-128%	---	---	
sec-Butylbenzene	1510	36.1	72.1	ug/kg dry	50	1440	ND	105	73-126%	---	---	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070556 - EPA 5035A						Soil						
Matrix Spike (0070556-MS1)			Prepared: 07/16/20 10:24 Analyzed: 07/20/20 15:13									
QC Source Sample: Non-SDG (A0G0456-04)												
tert-Butylbenzene	1450	36.1	72.1	ug/kg dry	50	1440	ND	101	73-125%	---	---	Q-54d
Carbon disulfide	2080	361	721	ug/kg dry	50	1440	ND	145	63-132%	---	---	
Carbon tetrachloride	1530	36.1	72.1	ug/kg dry	50	1440	ND	106	70-135%	---	---	
Chlorobenzene	1480	18.0	36.1	ug/kg dry	50	1440	ND	103	79-120%	---	---	
Chloroethane	1620	361	721	ug/kg dry	50	1440	ND	112	59-139%	---	---	Q-54g
Chloroform	1560	36.1	72.1	ug/kg dry	50	1440	ND	109	78-123%	---	---	
Chloromethane	1470	180	361	ug/kg dry	50	1440	ND	102	50-136%	---	---	
2-Chlorotoluene	1420	36.1	72.1	ug/kg dry	50	1440	ND	99	75-122%	---	---	
4-Chlorotoluene	1500	36.1	72.1	ug/kg dry	50	1440	ND	104	72-124%	---	---	Q-54f
Dibromochloromethane	1440	72.1	144	ug/kg dry	50	1440	ND	100	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1220	180	361	ug/kg dry	50	1440	ND	85	61-132%	---	---	
1,2-Dibromoethane (EDB)	1570	36.1	72.1	ug/kg dry	50	1440	ND	109	78-122%	---	---	
Dibromomethane	1550	36.1	72.1	ug/kg dry	50	1440	ND	107	78-125%	---	---	Q-54g
1,2-Dichlorobenzene	1430	18.0	36.1	ug/kg dry	50	1440	ND	99	78-121%	---	---	
1,3-Dichlorobenzene	1500	18.0	36.1	ug/kg dry	50	1440	ND	104	77-121%	---	---	
1,4-Dichlorobenzene	1400	18.0	36.1	ug/kg dry	50	1440	ND	97	75-120%	---	---	
Dichlorodifluoromethane	2070	72.1	144	ug/kg dry	50	1440	ND	144	29-149%	---	---	Q-54f
1,1-Dichloroethane	1520	18.0	36.1	ug/kg dry	50	1440	ND	105	76-125%	---	---	
1,2-Dichloroethane (EDC)	1570	18.0	36.1	ug/kg dry	50	1440	ND	109	73-128%	---	---	
1,1-Dichloroethene	1830	18.0	36.1	ug/kg dry	50	1440	ND	127	70-131%	---	---	
cis-1,2-Dichloroethene	1430	18.0	36.1	ug/kg dry	50	1440	ND	99	77-123%	---	---	Q-54f
trans-1,2-Dichloroethene	1530	18.0	36.1	ug/kg dry	50	1440	ND	106	74-125%	---	---	
1,2-Dichloropropane	1480	18.0	36.1	ug/kg dry	50	1440	ND	103	76-123%	---	---	
1,3-Dichloropropane	1530	36.1	72.1	ug/kg dry	50	1440	ND	106	77-121%	---	---	
2,2-Dichloropropane	1490	36.1	72.1	ug/kg dry	50	1440	ND	103	67-133%	---	---	Q-54f
1,1-Dichloropropene	1500	36.1	72.1	ug/kg dry	50	1440	ND	104	76-125%	---	---	
cis-1,3-Dichloropropene	1460	36.1	72.1	ug/kg dry	50	1440	ND	101	74-126%	---	---	
trans-1,3-Dichloropropene	1680	36.1	72.1	ug/kg dry	50	1440	ND	117	71-130%	---	---	
Ethylbenzene	1490	18.0	36.1	ug/kg dry	50	1440	ND	103	76-122%	---	---	Q-54f
Hexachlorobutadiene	1330	72.1	144	ug/kg dry	50	1440	ND	92	61-135%	---	---	
2-Hexanone	2860	361	721	ug/kg dry	50	2880	ND	99	53-145%	---	---	
Isopropylbenzene	1430	36.1	72.1	ug/kg dry	50	1440	ND	99	68-134%	---	---	
4-Isopropyltoluene	1470	36.1	72.1	ug/kg dry	50	1440	ND	102	73-127%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070556 - EPA 5035A						Soil						
Matrix Spike (0070556-MS1)			Prepared: 07/16/20 10:24 Analyzed: 07/20/20 15:13									
QC Source Sample: Non-SDG (A0G0456-04)												
Methylene chloride	1520	361	721	ug/kg dry	50	1440	ND	106	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3150	361	721	ug/kg dry	50	2880	ND	109	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1310	36.1	72.1	ug/kg dry	50	1440	ND	91	73-125%	---	---	
Naphthalene	1370	72.1	144	ug/kg dry	50	1440	ND	95	62-129%	---	---	
n-Propylbenzene	1500	18.0	36.1	ug/kg dry	50	1440	ND	104	73-125%	---	---	
Styrene	1420	36.1	72.1	ug/kg dry	50	1440	ND	98	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1610	18.0	36.1	ug/kg dry	50	1440	ND	112	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1590	36.1	72.1	ug/kg dry	50	1440	ND	111	70-124%	---	---	
Tetrachloroethene (PCE)	1470	18.0	36.1	ug/kg dry	50	1440	ND	102	73-128%	---	---	
Toluene	1430	36.1	72.1	ug/kg dry	50	1440	ND	99	77-121%	---	---	
1,2,3-Trichlorobenzene	1410	180	361	ug/kg dry	50	1440	ND	98	66-130%	---	---	
1,2,4-Trichlorobenzene	1350	180	361	ug/kg dry	50	1440	ND	94	67-129%	---	---	
1,1,1-Trichloroethane	1580	18.0	36.1	ug/kg dry	50	1440	ND	110	73-130%	---	---	
1,1,2-Trichloroethane	1530	18.0	36.1	ug/kg dry	50	1440	ND	106	78-121%	---	---	
Trichloroethene (TCE)	1360	18.0	36.1	ug/kg dry	50	1440	ND	94	77-123%	---	---	
Trichlorofluoromethane	1570	72.1	144	ug/kg dry	50	1440	ND	109	62-140%	---	---	
1,2,3-Trichloropropane	1500	36.1	72.1	ug/kg dry	50	1440	ND	104	73-125%	---	---	
1,2,4-Trimethylbenzene	1540	36.1	72.1	ug/kg dry	50	1440	ND	107	75-123%	---	---	
1,3,5-Trimethylbenzene	1460	36.1	72.1	ug/kg dry	50	1440	ND	101	73-124%	---	---	
Vinyl chloride	1570	18.0	36.1	ug/kg dry	50	1440	ND	109	56-135%	---	---	
m,p-Xylene	2990	36.1	72.1	ug/kg dry	50	2880	ND	104	77-124%	---	---	
o-Xylene	1390	18.0	36.1	ug/kg dry	50	1440	ND	96	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		79-120 %		"						

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
Blank (0070574-BLK1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 15:02							
5035A/8260D												
Acetone	ND	333	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	3.33	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	333	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
Blank (0070574-BLK1)						Prepared: 07/20/20 09:00 Analyzed: 07/20/20 15:02						
1,2-Dichloropropane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 101 % Limits: 80-120 % Dilution: 1x												

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Philip Nerenberg, Lab Director

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070574 - EPA 5035A						Soil						
Blank (0070574-BLK1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 15:02							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		107 %		79-120 %		"						
LCS (0070574-BS1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 14:08							
5035A/8260D												
Acetone	2100	500	1000	ug/kg wet	50	2000	---	105	80-120%	---	---	
Acrylonitrile	1170	50.0	100	ug/kg wet	50	1000	---	117	80-120%	---	---	
Benzene	1030	5.00	10.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromobenzene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Bromochloromethane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Bromodichloromethane	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Bromoform	1230	50.0	100	ug/kg wet	50	1000	---	123	80-120%	---	---	Q-56
Bromomethane	1290	500	500	ug/kg wet	50	1000	---	129	80-120%	---	---	Q-56
2-Butanone (MEK)	2270	250	500	ug/kg wet	50	2000	---	114	80-120%	---	---	
n-Butylbenzene	1180	25.0	50.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
sec-Butylbenzene	1140	25.0	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
tert-Butylbenzene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Carbon disulfide	1040	250	500	ug/kg wet	50	1000	---	104	80-120%	---	---	
Carbon tetrachloride	1130	25.0	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Chlorobenzene	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Chloroethane	848	250	500	ug/kg wet	50	1000	---	85	80-120%	---	---	
Chloroform	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Chloromethane	966	125	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
2-Chlorotoluene	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
4-Chlorotoluene	1140	25.0	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
Dibromochloromethane	1170	50.0	100	ug/kg wet	50	1000	---	117	80-120%	---	---	
1,2-Dibromo-3-chloropropane	1050	125	250	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2-Dibromoethane (EDB)	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Dibromomethane	1150	25.0	50.0	ug/kg wet	50	1000	---	115	80-120%	---	---	
1,2-Dichlorobenzene	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,3-Dichlorobenzene	1120	12.5	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,4-Dichlorobenzene	984	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dichlorodifluoromethane	1050	50.0	100	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,1-Dichloroethane	966	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070574 - EPA 5035A							Soil					
LCS (0070574-BS1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 14:08							
1,2-Dichloroethane (EDC)	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1-Dichloroethene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
cis-1,2-Dichloroethene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,2-Dichloropropane	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,3-Dichloropropane	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
2,2-Dichloropropane	1160	25.0	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
1,1-Dichloropropene	1160	25.0	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
cis-1,3-Dichloropropene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
trans-1,3-Dichloropropene	1200	25.0	50.0	ug/kg wet	50	1000	---	120	80-120%	---	---	
Ethylbenzene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Hexachlorobutadiene	1070	50.0	100	ug/kg wet	50	1000	---	107	80-120%	---	---	
2-Hexanone	1940	250	500	ug/kg wet	50	2000	---	97	80-120%	---	---	
Isopropylbenzene	997	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Isopropyltoluene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Methylene chloride	1130	250	500	ug/kg wet	50	1000	---	113	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2020	250	500	ug/kg wet	50	2000	---	101	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1130	25.0	50.0	ug/kg wet	50	1000	---	113	80-120%	---	---	
Naphthalene	944	50.0	100	ug/kg wet	50	1000	---	94	80-120%	---	---	
n-Propylbenzene	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Styrene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Tetrachloroethene (PCE)	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Toluene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	1040	125	250	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	994	125	250	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,1,1-Trichloroethane	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,1,2-Trichloroethane	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Trichloroethene (TCE)	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Trichlorofluoromethane	892	50.0	100	ug/kg wet	50	1000	---	89	80-120%	---	---	
1,2,3-Trichloropropane	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2,4-Trimethylbenzene	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,3,5-Trimethylbenzene	1160	25.0	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
LCS (0070574-BS1)			Prepared: 07/20/20 09:00		Analyzed: 07/20/20 14:08							
Vinyl chloride	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
m,p-Xylene	2010	25.0	50.0	ug/kg wet	50	2000	---	101	80-120%	---	---	
o-Xylene	960	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		79-120 %		"						

Duplicate (0070574-DUP1)

Prepared: 07/16/20 11:35 Analyzed: 07/21/20 00:07

QC Source Sample: DP-16(6-7) (A0G0466-13)**5035A/8260D**

Acetone	ND	581	1160	ug/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	5.81	11.6	ug/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	581	581	ug/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	291	581	ug/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	291	581	ug/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	291	581	ug/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	145	291	ug/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	145	291	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070574 - EPA 5035A						Soil						
Duplicate (0070574-DUP1)			Prepared: 07/16/20 11:35 Analyzed: 07/21/20 00:07									
QC Source Sample: DP-16(6-7) (A0G0466-13)												
1,2-Dichlorobenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	291	581	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	291	581	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	291	581	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	145	291	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	145	291	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
Duplicate (0070574-DUP1)			Prepared: 07/16/20 11:35 Analyzed: 07/21/20 00:07									
QC Source Sample: DP-16(6-7) (A0G0466-13)												
1,1,2-Trichloroethane	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	58.1	116	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	29.1	58.1	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	14.5	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		79-120 %		"						

Duplicate (0070574-DUP2) Prepared: 07/16/20 12:50 Analyzed: 07/21/20 01:01**QC Source Sample: DP-17(0.5-1.5) (A0G0466-18)****5035A/8260D**

Acetone	ND	689	1380	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	6.89	13.8	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	689	689	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	344	689	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	344	689	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	344	689	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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ORELAP ID: OR100062

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
Duplicate (0070574-DUP2)			Prepared: 07/16/20 12:50 Analyzed: 07/21/20 01:01									
QC Source Sample: DP-17(0.5-1.5) (A0G0466-18)												
Chloromethane	ND	172	344	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	172	344	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	344	689	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	344	689	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	344	689	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
Duplicate (0070574-DUP2)			Prepared: 07/16/20 12:50 Analyzed: 07/21/20 01:01									
QC Source Sample: DP-17(0.5-1.5) (A0G0466-18)												
1,1,1,2-Tetrachloroethane	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	172	344	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	172	344	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	68.9	138	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	34.4	68.9	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	17.2	34.4	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		79-120 %		"						

Matrix Spike (0070574-MS1)

Prepared: 07/16/20 14:00 Analyzed: 07/20/20 20:57

QC Source Sample: Non-SDG (A0G0490-15)**5035A/8260D**

Acetone	1170	241	483	ug/kg dry	50	965	ND	121	36-164%	---	---	
Acrylonitrile	556	24.1	48.3	ug/kg dry	50	483	ND	115	65-134%	---	---	
Benzene	492	2.41	4.83	ug/kg dry	50	483	ND	102	77-121%	---	---	
Bromobenzene	467	6.03	12.1	ug/kg dry	50	483	ND	97	78-121%	---	---	
Bromochloromethane	543	12.1	24.1	ug/kg dry	50	483	ND	113	78-125%	---	---	
Bromodichloromethane	537	12.1	24.1	ug/kg dry	50	483	ND	111	75-127%	---	---	
Bromoform	590	24.1	48.3	ug/kg dry	50	483	ND	122	67-132%	---	---	Q-54f
Bromomethane	631	241	241	ug/kg dry	50	483	ND	131	53-143%	---	---	Q-54j
2-Butanone (MEK)	1130	121	241	ug/kg dry	50	965	ND	117	51-148%	---	---	
n-Butylbenzene	535	12.1	24.1	ug/kg dry	50	483	ND	111	70-128%	---	---	

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ORELAP ID: OR100062

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070574 - EPA 5035A						Soil						
Matrix Spike (0070574-MS1)			Prepared: 07/16/20 14:00 Analyzed: 07/20/20 20:57									
QC Source Sample: Non-SDG (A0G0490-15)												
sec-Butylbenzene	517	12.1	24.1	ug/kg dry	50	483	ND	107	73-126%	---	---	
tert-Butylbenzene	514	12.1	24.1	ug/kg dry	50	483	ND	106	73-125%	---	---	
Carbon disulfide	466	121	241	ug/kg dry	50	483	ND	97	63-132%	---	---	
Carbon tetrachloride	561	12.1	24.1	ug/kg dry	50	483	ND	116	70-135%	---	---	
Chlorobenzene	479	6.03	12.1	ug/kg dry	50	483	ND	99	79-120%	---	---	
Chloroethane	479	121	241	ug/kg dry	50	483	ND	99	59-139%	---	---	
Chloroform	543	12.1	24.1	ug/kg dry	50	483	ND	113	78-123%	---	---	
Chloromethane	459	60.3	121	ug/kg dry	50	483	ND	95	50-136%	---	---	
2-Chlorotoluene	479	12.1	24.1	ug/kg dry	50	483	ND	99	75-122%	---	---	
4-Chlorotoluene	523	12.1	24.1	ug/kg dry	50	483	ND	108	72-124%	---	---	
Dibromochloromethane	558	24.1	48.3	ug/kg dry	50	483	ND	116	74-126%	---	---	
1,2-Dibromo-3-chloropropane	467	60.3	121	ug/kg dry	50	483	ND	97	61-132%	---	---	
1,2-Dibromoethane (EDB)	520	12.1	24.1	ug/kg dry	50	483	ND	108	78-122%	---	---	
Dibromomethane	556	12.1	24.1	ug/kg dry	50	483	ND	115	78-125%	---	---	
1,2-Dichlorobenzene	482	6.03	12.1	ug/kg dry	50	483	ND	100	78-121%	---	---	
1,3-Dichlorobenzene	504	6.03	12.1	ug/kg dry	50	483	ND	105	77-121%	---	---	
1,4-Dichlorobenzene	445	6.03	12.1	ug/kg dry	50	483	ND	92	75-120%	---	---	
Dichlorodifluoromethane	534	24.1	48.3	ug/kg dry	50	483	ND	111	29-149%	---	---	
1,1-Dichloroethane	478	6.03	12.1	ug/kg dry	50	483	ND	99	76-125%	---	---	
1,2-Dichloroethane (EDC)	560	6.03	12.1	ug/kg dry	50	483	ND	116	73-128%	---	---	
1,1-Dichloroethene	496	6.03	12.1	ug/kg dry	50	483	ND	103	70-131%	---	---	
cis-1,2-Dichloroethene	476	6.03	12.1	ug/kg dry	50	483	ND	99	77-123%	---	---	
trans-1,2-Dichloroethene	504	6.03	12.1	ug/kg dry	50	483	ND	105	74-125%	---	---	
1,2-Dichloropropane	516	6.03	12.1	ug/kg dry	50	483	ND	107	76-123%	---	---	
1,3-Dichloropropane	512	12.1	24.1	ug/kg dry	50	483	ND	106	77-121%	---	---	
2,2-Dichloropropane	457	12.1	24.1	ug/kg dry	50	483	ND	95	67-133%	---	---	
1,1-Dichloropropene	543	12.1	24.1	ug/kg dry	50	483	ND	112	76-125%	---	---	
cis-1,3-Dichloropropene	477	12.1	24.1	ug/kg dry	50	483	ND	99	74-126%	---	---	
trans-1,3-Dichloropropene	566	12.1	24.1	ug/kg dry	50	483	ND	117	71-130%	---	---	
Ethylbenzene	500	6.03	12.1	ug/kg dry	50	483	ND	104	76-122%	---	---	
Hexachlorobutadiene	490	24.1	48.3	ug/kg dry	50	483	ND	102	61-135%	---	---	
2-Hexanone	956	121	241	ug/kg dry	50	965	ND	99	53-145%	---	---	
Isopropylbenzene	457	12.1	24.1	ug/kg dry	50	483	ND	95	68-134%	---	---	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070574 - EPA 5035A						Soil						
Matrix Spike (0070574-MS1)			Prepared: 07/16/20 14:00 Analyzed: 07/20/20 20:57									
QC Source Sample: Non-SDG (A0G0490-15)												
4-Isopropyltoluene	470	12.1	24.1	ug/kg dry	50	483	ND	97	73-127%	---	---	
Methylene chloride	529	121	241	ug/kg dry	50	483	ND	110	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	992	121	241	ug/kg dry	50	965	ND	103	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	517	12.1	24.1	ug/kg dry	50	483	ND	107	73-125%	---	---	
Naphthalene	419	24.1	48.3	ug/kg dry	50	483	ND	87	62-129%	---	---	
n-Propylbenzene	491	6.03	12.1	ug/kg dry	50	483	ND	102	73-125%	---	---	
Styrene	480	12.1	24.1	ug/kg dry	50	483	ND	99	76-124%	---	---	
1,1,1,2-Tetrachloroethane	531	6.03	12.1	ug/kg dry	50	483	ND	110	78-125%	---	---	
1,1,2,2-Tetrachloroethane	475	12.1	24.1	ug/kg dry	50	483	ND	98	70-124%	---	---	
Tetrachloroethene (PCE)	513	6.03	12.1	ug/kg dry	50	483	ND	106	73-128%	---	---	
Toluene	465	12.1	24.1	ug/kg dry	50	483	ND	96	77-121%	---	---	
1,2,3-Trichlorobenzene	460	60.3	121	ug/kg dry	50	483	ND	95	66-130%	---	---	
1,2,4-Trichlorobenzene	420	60.3	121	ug/kg dry	50	483	ND	87	67-129%	---	---	
1,1,1-Trichloroethane	523	6.03	12.1	ug/kg dry	50	483	ND	108	73-130%	---	---	
1,1,2-Trichloroethane	518	6.03	12.1	ug/kg dry	50	483	ND	107	78-121%	---	---	
Trichloroethene (TCE)	508	6.03	12.1	ug/kg dry	50	483	ND	105	77-123%	---	---	
Trichlorofluoromethane	573	24.1	48.3	ug/kg dry	50	483	ND	119	62-140%	---	---	
1,2,3-Trichloropropane	525	12.1	24.1	ug/kg dry	50	483	ND	109	73-125%	---	---	
1,2,4-Trimethylbenzene	502	12.1	24.1	ug/kg dry	50	483	ND	104	75-123%	---	---	
1,3,5-Trimethylbenzene	525	12.1	24.1	ug/kg dry	50	483	ND	109	73-124%	---	---	
Vinyl chloride	527	6.03	12.1	ug/kg dry	50	483	ND	109	56-135%	---	---	
m,p-Xylene	948	12.1	24.1	ug/kg dry	50	965	ND	98	77-124%	---	---	
o-Xylene	442	6.03	12.1	ug/kg dry	50	483	ND	92	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		79-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A						Soil						
Blank (0070607-BLK1)			Prepared: 07/21/20 09:00		Analyzed: 07/21/20 11:40							
5035A/8260D												
Acetone	ND	333	667	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	3.33	6.67	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	333	333	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A						Soil						
Blank (0070607-BLK1)						Prepared: 07/21/20 09:00 Analyzed: 07/21/20 11:40						
1,2-Dichloropropane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	333	667	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	167	333	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	83.3	167	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	33.3	66.7	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	16.7	33.3	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	8.33	16.7	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 100 % Limits: 80-120 % Dilution: 1x												

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A												Soil
Blank (0070607-BLK1)												Prepared: 07/21/20 09:00 Analyzed: 07/21/20 11:40
<i>Surr: Toluene-d8 (Surr)</i>												<i>Recovery: 101 % Limits: 80-120 % Dilution: 1x</i>
<i>4-Bromofluorobenzene (Surr)</i>												<i>103 % 79-120 % "</i>
LCS (0070607-BS1)												Prepared: 07/21/20 09:00 Analyzed: 07/21/20 10:46
5035A/8260D												
Acetone	2190	500	1000	ug/kg wet	50	2000	---	110	80-120%	---	---	
Acrylonitrile	1080	50.0	100	ug/kg wet	50	1000	---	108	80-120%	---	---	
Benzene	966	5.00	10.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Bromobenzene	958	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Bromochloromethane	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Bromodichloromethane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Bromoform	1180	50.0	100	ug/kg wet	50	1000	---	118	80-120%	---	---	
Bromomethane	1300	500	500	ug/kg wet	50	1000	---	130	80-120%	---	---	Q-56
2-Butanone (MEK)	2190	250	500	ug/kg wet	50	2000	---	110	80-120%	---	---	
n-Butylbenzene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
sec-Butylbenzene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
tert-Butylbenzene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Carbon disulfide	997	250	500	ug/kg wet	50	1000	---	100	80-120%	---	---	
Carbon tetrachloride	1140	25.0	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
Chlorobenzene	978	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Chloroethane	1060	250	500	ug/kg wet	50	1000	---	106	80-120%	---	---	
Chloroform	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Chloromethane	920	125	250	ug/kg wet	50	1000	---	92	80-120%	---	---	
2-Chlorotoluene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
4-Chlorotoluene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Dibromochloromethane	1120	50.0	100	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2-Dibromo-3-chloropropane	971	125	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2-Dibromoethane (EDB)	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Dibromomethane	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,2-Dichlorobenzene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,3-Dichlorobenzene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,4-Dichlorobenzene	945	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Dichlorodifluoromethane	1120	50.0	100	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,1-Dichloroethane	975	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A							Soil					
LCS (0070607-BS1)			Prepared: 07/21/20 09:00		Analyzed: 07/21/20 10:46							
1,2-Dichloroethane (EDC)	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
1,1-Dichloroethene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
cis-1,2-Dichloroethene	952	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
trans-1,2-Dichloroethene	1000	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2-Dichloropropane	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,3-Dichloropropane	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
2,2-Dichloropropane	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,1-Dichloropropene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
cis-1,3-Dichloropropene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
trans-1,3-Dichloropropene	1170	25.0	50.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
Ethylbenzene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Hexachlorobutadiene	1010	50.0	100	ug/kg wet	50	1000	---	101	80-120%	---	---	
2-Hexanone	1880	250	500	ug/kg wet	50	2000	---	94	80-120%	---	---	
Isopropylbenzene	934	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
4-Isopropyltoluene	980	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Methylene chloride	1360	500	1000	ug/kg wet	50	1000	---	136	80-120%	---	---	Q-56
4-Methyl-2-pentanone (MiBK)	2020	250	500	ug/kg wet	50	2000	---	101	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Naphthalene	866	50.0	100	ug/kg wet	50	1000	---	87	80-120%	---	---	
n-Propylbenzene	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Styrene	983	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Tetrachloroethene (PCE)	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Toluene	972	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	955	125	250	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2,4-Trichlorobenzene	896	125	250	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,1,1-Trichloroethane	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,1,2-Trichloroethane	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Trichloroethene (TCE)	958	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Trichlorofluoromethane	1190	50.0	100	ug/kg wet	50	1000	---	119	80-120%	---	---	
1,2,3-Trichloropropane	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,2,4-Trimethylbenzene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,3,5-Trimethylbenzene	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070607 - EPA 5035A						Soil						
LCS (0070607-BS1)			Prepared: 07/21/20 09:00		Analyzed: 07/21/20 10:46							
Vinyl chloride	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
m,p-Xylene	1980	25.0	50.0	ug/kg wet	50	2000	---	99	80-120%	---	---	
o-Xylene	916	12.5	25.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		79-120 %		"						

Duplicate (0070607-DUP1)

Prepared: 07/16/20 17:00 Analyzed: 07/21/20 15:17

QC Source Sample: DP-19(0.5-1.5) (A0G0466-30)**5035A/8260D**

Acetone	ND	613	1230	ug/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	6.13	12.3	ug/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	613	613	ug/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	306	613	ug/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	306	613	ug/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	306	613	ug/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	153	306	ug/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	153	306	ug/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A						Soil						
Duplicate (0070607-DUP1)			Prepared: 07/16/20 17:00 Analyzed: 07/21/20 15:17									
QC Source Sample: DP-19(0.5-1.5) (A0G0466-30)												
1,2-Dichlorobenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	306	613	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	613	1230	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	306	613	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	153	306	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	153	306	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A						Soil						
Duplicate (0070607-DUP1)			Prepared: 07/16/20 17:00		Analyzed: 07/21/20 15:17							
QC Source Sample: DP-19(0.5-1.5) (A0G0466-30)												
1,1,2-Trichloroethane	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	61.3	123	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	30.6	61.3	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	15.3	30.6	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 110 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		106 %		79-120 %		"						

Matrix Spike (0070607-MS1)

Prepared: 07/17/20 12:11 Analyzed: 07/21/20 17:34

QC Source Sample: Non-SDG (A0G0487-09)**5035A/8260D**

Acetone	2410	541	1080	ug/kg dry	50	2160	ND	112	36-164%	---	---	
Acrylonitrile	1230	54.1	108	ug/kg dry	50	1080	ND	114	65-134%	---	---	
Benzene	1110	5.41	10.8	ug/kg dry	50	1080	ND	103	77-121%	---	---	
Bromobenzene	1130	13.5	27.1	ug/kg dry	50	1080	ND	104	78-121%	---	---	
Bromochloromethane	1180	27.1	54.1	ug/kg dry	50	1080	ND	109	78-125%	---	---	
Bromodichloromethane	1190	27.1	54.1	ug/kg dry	50	1080	ND	110	75-127%	---	---	
Bromoform	1330	54.1	108	ug/kg dry	50	1080	ND	123	67-132%	---	---	
Bromomethane	1540	541	541	ug/kg dry	50	1080	ND	142	53-143%	---	---	Q-54
2-Butanone (MEK)	2440	271	541	ug/kg dry	50	2160	ND	113	51-148%	---	---	
n-Butylbenzene	1190	27.1	54.1	ug/kg dry	50	1080	ND	111	70-128%	---	---	
sec-Butylbenzene	1160	27.1	54.1	ug/kg dry	50	1080	ND	107	73-126%	---	---	
tert-Butylbenzene	1140	27.1	54.1	ug/kg dry	50	1080	ND	106	73-125%	---	---	
Carbon disulfide	1070	271	541	ug/kg dry	50	1080	ND	99	63-132%	---	---	
Carbon tetrachloride	1220	27.1	54.1	ug/kg dry	50	1080	ND	113	70-135%	---	---	
Chlorobenzene	1090	13.5	27.1	ug/kg dry	50	1080	ND	101	79-120%	---	---	
Chloroethane	960	271	541	ug/kg dry	50	1080	ND	89	59-139%	---	---	
Chloroform	1190	27.1	54.1	ug/kg dry	50	1080	ND	110	78-123%	---	---	

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Philip Nerenberg, Lab Director

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A						Soil						
Matrix Spike (0070607-MS1)			Prepared: 07/17/20 12:11		Analyzed: 07/21/20 17:34							
QC Source Sample: Non-SDG (A0G0487-09)												
Chloromethane	936	135	271	ug/kg dry	50	1080	ND	87	50-136%	---	---	
2-Chlorotoluene	1140	27.1	54.1	ug/kg dry	50	1080	ND	105	75-122%	---	---	
4-Chlorotoluene	1190	27.1	54.1	ug/kg dry	50	1080	ND	110	72-124%	---	---	
Dibromochloromethane	1250	54.1	108	ug/kg dry	50	1080	ND	116	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1020	135	271	ug/kg dry	50	1080	ND	94	61-132%	---	---	
1,2-Dibromoethane (EDB)	1170	27.1	54.1	ug/kg dry	50	1080	ND	108	78-122%	---	---	
Dibromomethane	1250	27.1	54.1	ug/kg dry	50	1080	ND	116	78-125%	---	---	
1,2-Dichlorobenzene	1100	13.5	27.1	ug/kg dry	50	1080	ND	102	78-121%	---	---	
1,3-Dichlorobenzene	1150	13.5	27.1	ug/kg dry	50	1080	ND	107	77-121%	---	---	
1,4-Dichlorobenzene	1030	13.5	27.1	ug/kg dry	50	1080	ND	95	75-120%	---	---	
Dichlorodifluoromethane	1100	54.1	108	ug/kg dry	50	1080	ND	102	29-149%	---	---	
1,1-Dichloroethane	1100	13.5	27.1	ug/kg dry	50	1080	ND	101	76-125%	---	---	
1,2-Dichloroethane (EDC)	1160	13.5	27.1	ug/kg dry	50	1080	ND	108	73-128%	---	---	
1,1-Dichloroethene	1040	13.5	27.1	ug/kg dry	50	1080	ND	97	70-131%	---	---	
cis-1,2-Dichloroethene	1090	13.5	27.1	ug/kg dry	50	1080	ND	101	77-123%	---	---	
trans-1,2-Dichloroethene	1100	13.5	27.1	ug/kg dry	50	1080	ND	102	74-125%	---	---	
1,2-Dichloropropane	1170	13.5	27.1	ug/kg dry	50	1080	ND	108	76-123%	---	---	
1,3-Dichloropropane	1130	27.1	54.1	ug/kg dry	50	1080	ND	105	77-121%	---	---	
2,2-Dichloropropane	1090	27.1	54.1	ug/kg dry	50	1080	ND	100	67-133%	---	---	
1,1-Dichloropropene	1240	27.1	54.1	ug/kg dry	50	1080	ND	114	76-125%	---	---	
cis-1,3-Dichloropropene	1100	27.1	54.1	ug/kg dry	50	1080	ND	102	74-126%	---	---	
trans-1,3-Dichloropropene	1230	27.1	54.1	ug/kg dry	50	1080	ND	114	71-130%	---	---	
Ethylbenzene	1100	13.5	27.1	ug/kg dry	50	1080	ND	102	76-122%	---	---	
Hexachlorobutadiene	1070	54.1	108	ug/kg dry	50	1080	ND	99	61-135%	---	---	
2-Hexanone	1980	271	541	ug/kg dry	50	2160	ND	92	53-145%	---	---	
Isopropylbenzene	1030	27.1	54.1	ug/kg dry	50	1080	ND	95	68-134%	---	---	
4-Isopropyltoluene	1070	27.1	54.1	ug/kg dry	50	1080	ND	99	73-127%	---	---	
Methylene chloride	1200	541	1080	ug/kg dry	50	1080	ND	111	70-128%	---	---	Q-54b
4-Methyl-2-pentanone (MiBK)	2110	271	541	ug/kg dry	50	2160	ND	98	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1190	27.1	54.1	ug/kg dry	50	1080	ND	110	73-125%	---	---	
Naphthalene	925	54.1	108	ug/kg dry	50	1080	ND	86	62-129%	---	---	
n-Propylbenzene	1110	13.5	27.1	ug/kg dry	50	1080	ND	103	73-125%	---	---	
Styrene	1100	27.1	54.1	ug/kg dry	50	1080	ND	101	76-124%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070607 - EPA 5035A						Soil						
Matrix Spike (0070607-MS1)			Prepared: 07/17/20 12:11 Analyzed: 07/21/20 17:34									
QC Source Sample: Non-SDG (A0G0487-09)												
1,1,1,2-Tetrachloroethane	1170	13.5	27.1	ug/kg dry	50	1080	ND	109	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1110	27.1	54.1	ug/kg dry	50	1080	ND	103	70-124%	---	---	
Tetrachloroethene (PCE)	1180	13.5	27.1	ug/kg dry	50	1080	ND	109	73-128%	---	---	
Toluene	1030	27.1	54.1	ug/kg dry	50	1080	ND	95	77-121%	---	---	
1,2,3-Trichlorobenzene	1010	135	271	ug/kg dry	50	1080	ND	93	66-130%	---	---	
1,2,4-Trichlorobenzene	969	135	271	ug/kg dry	50	1080	ND	90	67-129%	---	---	
1,1,1-Trichloroethane	1120	13.5	27.1	ug/kg dry	50	1080	ND	104	73-130%	---	---	
1,1,2-Trichloroethane	1150	13.5	27.1	ug/kg dry	50	1080	ND	107	78-121%	---	---	
Trichloroethene (TCE)	1150	13.5	27.1	ug/kg dry	50	1080	ND	107	77-123%	---	---	
Trichlorofluoromethane	910	54.1	108	ug/kg dry	50	1080	ND	84	62-140%	---	---	
1,2,3-Trichloropropane	1130	27.1	54.1	ug/kg dry	50	1080	ND	105	73-125%	---	---	
1,2,4-Trimethylbenzene	1130	27.1	54.1	ug/kg dry	50	1080	ND	105	75-123%	---	---	
1,3,5-Trimethylbenzene	1190	27.1	54.1	ug/kg dry	50	1080	ND	110	73-124%	---	---	
Vinyl chloride	1180	13.5	27.1	ug/kg dry	50	1080	ND	110	56-135%	---	---	
m,p-Xylene	2060	27.1	54.1	ug/kg dry	50	2160	ND	95	77-124%	---	---	
o-Xylene	1000	13.5	27.1	ug/kg dry	50	1080	ND	93	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		79-120 %		"						

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
Blank (0070681-BLK1)			Prepared: 07/22/20 20:07		Analyzed: 07/22/20 22:18							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070681 - EPA 5030B						Water						
Blank (0070681-BLK1)						Prepared: 07/22/20 20:07 Analyzed: 07/22/20 22:18						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 102 % Limits: 80-120 % Dilution: 1x												

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
Blank (0070681-BLK1)			Prepared: 07/22/20 20:07		Analyzed: 07/22/20 22:18							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						
LCS (0070681-BS1)			Prepared: 07/22/20 20:07		Analyzed: 07/22/20 21:24							
EPA 8260D												
Acetone	35.3	10.0	20.0	ug/L	1	40.0	---	88	80-120%	---	---	
Acrylonitrile	20.0	1.00	2.00	ug/L	1	20.0	---	100	80-120%	---	---	
Benzene	20.3	0.100	0.200	ug/L	1	20.0	---	101	80-120%	---	---	
Bromobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Bromochloromethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Bromodichloromethane	20.7	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Bromoform	17.9	0.500	1.00	ug/L	1	20.0	---	89	80-120%	---	---	
Bromomethane	18.0	5.00	5.00	ug/L	1	20.0	---	90	80-120%	---	---	
2-Butanone (MEK)	39.3	5.00	10.0	ug/L	1	40.0	---	98	80-120%	---	---	
n-Butylbenzene	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
sec-Butylbenzene	21.9	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
tert-Butylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Carbon disulfide	19.3	5.00	10.0	ug/L	1	20.0	---	96	80-120%	---	---	
Carbon tetrachloride	22.7	0.500	1.00	ug/L	1	20.0	---	114	80-120%	---	---	
Chlorobenzene	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Chloroethane	16.8	5.00	5.00	ug/L	1	20.0	---	84	80-120%	---	---	
Chloroform	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
Chloromethane	22.9	2.50	5.00	ug/L	1	20.0	---	114	80-120%	---	---	
2-Chlorotoluene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
4-Chlorotoluene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Dibromochloromethane	18.8	0.500	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
1,2-Dibromo-3-chloropropane	17.8	5.00	10.0	ug/L	1	20.0	---	89	80-120%	---	---	
1,2-Dibromoethane (EDB)	19.5	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Dibromomethane	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,2-Dichlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
1,3-Dichlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
1,4-Dichlorobenzene	18.6	0.250	0.500	ug/L	1	20.0	---	93	80-120%	---	---	
Dichlorodifluoromethane	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,1-Dichloroethane	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	

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Philip Nerenberg, Lab Director

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
LCS (0070681-BS1)						Prepared: 07/22/20 20:07 Analyzed: 07/22/20 21:24						
1,2-Dichloroethane (EDC)	20.0	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
1,1-Dichloroethene	18.8	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
cis-1,2-Dichloroethene	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichloropropane	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,3-Dichloropropane	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
2,2-Dichloropropane	26.4	0.500	1.00	ug/L	1	20.0	---	132	80-120%	---	---	Q-56
1,1-Dichloropropene	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
cis-1,3-Dichloropropene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,3-Dichloropropene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Ethylbenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Hexachlorobutadiene	20.8	2.50	5.00	ug/L	1	20.0	---	104	80-120%	---	---	
2-Hexanone	39.6	5.00	10.0	ug/L	1	40.0	---	99	80-120%	---	---	
Isopropylbenzene	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
4-Isopropyltoluene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Methylene chloride	21.5	5.00	10.0	ug/L	1	20.0	---	107	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	40.8	5.00	10.0	ug/L	1	40.0	---	102	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Naphthalene	18.4	1.00	2.00	ug/L	1	20.0	---	92	80-120%	---	---	
n-Propylbenzene	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Styrene	20.9	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,1,1,2-Tetrachloroethane	18.8	0.400	0.800	ug/L	1	20.0	---	94	80-120%	---	---	
1,1,2,2-Tetrachloroethane	24.4	0.250	0.500	ug/L	1	20.0	---	122	80-120%	---	---	Q-56
Tetrachloroethene (PCE)	18.9	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
Toluene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,2,3-Trichlorobenzene	21.8	1.00	2.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,2,4-Trichlorobenzene	21.8	1.00	2.00	ug/L	1	20.0	---	109	80-120%	---	---	
1,1,1-Trichloroethane	22.4	0.200	0.400	ug/L	1	20.0	---	112	80-120%	---	---	
1,1,2-Trichloroethane	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Trichloroethene (TCE)	17.0	0.200	0.400	ug/L	1	20.0	---	85	80-120%	---	---	
Trichlorofluoromethane	20.1	1.00	2.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,3-Trichloropropane	18.5	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2,4-Trimethylbenzene	22.4	0.500	1.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,3,5-Trimethylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
LCS (0070681-BS1)			Prepared: 07/22/20 20:07		Analyzed: 07/22/20 21:24							
Vinyl chloride	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
m,p-Xylene	41.4	0.500	1.00	ug/L	1	40.0	---	103	80-120%	---	---	
o-Xylene	20.5	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (0070681-DUP1)

Prepared: 07/22/20 20:07 Analyzed: 07/23/20 03:43

QC Source Sample: Non-SDG (A0G0490-10)

Acetone	ND	20.0	20.0	ug/L	1	---	ND	---	---	---	30%
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070681 - EPA 5030B						Water						
Duplicate (0070681-DUP1)			Prepared: 07/22/20 20:07 Analyzed: 07/23/20 03:43									
QC Source Sample: Non-SDG (A0G0490-10)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
Duplicate (0070681-DUP1)			Prepared: 07/22/20 20:07 Analyzed: 07/23/20 03:43									
QC Source Sample: Non-SDG (A0G0490-10)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
Matrix Spike (0070681-MS1)			Prepared: 07/22/20 20:07 Analyzed: 07/23/20 09:08									
QC Source Sample: DP-14W (A0G0466-41)												
EPA 8260D												
Acetone	41.8	10.0	20.0	ug/L	1	40.0	ND	104	39-160%	---	---	
Acrylonitrile	20.8	1.00	2.00	ug/L	1	20.0	ND	104	63-135%	---	---	
Benzene	21.9	0.100	0.200	ug/L	1	20.0	ND	110	79-120%	---	---	
Bromobenzene	19.8	0.250	0.500	ug/L	1	20.0	ND	99	80-120%	---	---	
Bromochloromethane	23.1	0.500	1.00	ug/L	1	20.0	ND	115	78-123%	---	---	
Bromodichloromethane	22.2	0.500	1.00	ug/L	1	20.0	ND	111	79-125%	---	---	
Bromoform	19.4	0.500	1.00	ug/L	1	20.0	ND	97	66-130%	---	---	
Bromomethane	13.7	5.00	5.00	ug/L	1	20.0	ND	68	53-141%	---	---	
2-Butanone (MEK)	41.7	5.00	10.0	ug/L	1	40.0	ND	104	56-143%	---	---	
n-Butylbenzene	23.5	0.500	1.00	ug/L	1	20.0	ND	118	75-128%	---	---	
sec-Butylbenzene	23.6	0.500	1.00	ug/L	1	20.0	ND	118	77-126%	---	---	
tert-Butylbenzene	23.3	0.500	1.00	ug/L	1	20.0	ND	116	78-124%	---	---	
Carbon disulfide	22.4	5.00	10.0	ug/L	1	20.0	ND	112	64-133%	---	---	
Carbon tetrachloride	26.0	0.500	1.00	ug/L	1	20.0	ND	130	72-136%	---	---	
Chlorobenzene	20.8	0.250	0.500	ug/L	1	20.0	ND	104	80-120%	---	---	
Chloroethane	18.5	5.00	5.00	ug/L	1	20.0	ND	92	60-138%	---	---	
Chloroform	21.9	0.500	1.00	ug/L	1	20.0	ND	109	79-124%	---	---	
Chloromethane	33.0	2.50	5.00	ug/L	1	20.0	ND	165	50-139%	---	---	Q-01

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
Matrix Spike (0070681-MS1)			Prepared: 07/22/20 20:07		Analyzed: 07/23/20 09:08							
QC Source Sample: DP-14W (A0G0466-41)												
2-Chlorotoluene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	79-122%	---	---	
4-Chlorotoluene	21.7	0.500	1.00	ug/L	1	20.0	ND	108	78-122%	---	---	
Dibromochloromethane	20.4	0.500	1.00	ug/L	1	20.0	ND	102	74-126%	---	---	
1,2-Dibromo-3-chloropropane	19.1	5.00	10.0	ug/L	1	20.0	ND	95	62-128%	---	---	
1,2-Dibromoethane (EDB)	20.6	0.250	0.500	ug/L	1	20.0	ND	103	77-121%	---	---	
Dibromomethane	20.4	0.500	1.00	ug/L	1	20.0	ND	102	79-123%	---	---	
1,2-Dichlorobenzene	20.3	0.250	0.500	ug/L	1	20.0	ND	102	80-120%	---	---	
1,3-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
1,4-Dichlorobenzene	19.5	0.250	0.500	ug/L	1	20.0	ND	98	79-120%	---	---	
Dichlorodifluoromethane	21.1	0.500	1.00	ug/L	1	20.0	ND	106	32-152%	---	---	
1,1-Dichloroethane	21.6	0.200	0.400	ug/L	1	20.0	ND	108	77-125%	---	---	
1,2-Dichloroethane (EDC)	21.1	0.200	0.400	ug/L	1	20.0	ND	106	73-128%	---	---	
1,1-Dichloroethene	21.6	0.200	0.400	ug/L	1	20.0	ND	108	71-131%	---	---	
cis-1,2-Dichloroethene	25.6	0.200	0.400	ug/L	1	20.0	3.18	112	78-123%	---	---	
trans-1,2-Dichloroethene	22.2	0.200	0.400	ug/L	1	20.0	ND	111	75-124%	---	---	
1,2-Dichloropropane	21.4	0.250	0.500	ug/L	1	20.0	ND	107	78-122%	---	---	
1,3-Dichloropropane	21.8	0.500	1.00	ug/L	1	20.0	ND	109	80-120%	---	---	
2,2-Dichloropropane	23.9	0.500	1.00	ug/L	1	20.0	ND	120	60-139%	---	---	Q-54a
1,1-Dichloropropene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	79-125%	---	---	
cis-1,3-Dichloropropene	20.6	0.500	1.00	ug/L	1	20.0	ND	103	75-124%	---	---	
trans-1,3-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	ND	106	73-127%	---	---	
Ethylbenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	79-121%	---	---	
Hexachlorobutadiene	21.3	2.50	5.00	ug/L	1	20.0	ND	106	66-134%	---	---	
2-Hexanone	41.7	5.00	10.0	ug/L	1	40.0	ND	104	57-139%	---	---	
Isopropylbenzene	24.0	0.500	1.00	ug/L	1	20.0	ND	120	72-131%	---	---	
4-Isopropyltoluene	23.9	0.500	1.00	ug/L	1	20.0	ND	119	77-127%	---	---	
Methylene chloride	21.1	5.00	10.0	ug/L	1	20.0	ND	105	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	43.0	5.00	10.0	ug/L	1	40.0	ND	108	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	22.2	0.500	1.00	ug/L	1	20.0	ND	111	71-124%	---	---	
Naphthalene	18.6	1.00	2.00	ug/L	1	20.0	ND	93	61-128%	---	---	
n-Propylbenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	76-126%	---	---	
Styrene	22.3	0.500	1.00	ug/L	1	20.0	ND	112	78-123%	---	---	
1,1,1,2-Tetrachloroethane	21.6	0.400	0.800	ug/L	1	20.0	ND	108	78-124%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070681 - EPA 5030B						Water						
Matrix Spike (0070681-MS1)			Prepared: 07/22/20 20:07		Analyzed: 07/23/20 09:08							
QC Source Sample: DP-14W (A0G0466-41)												
1,1,2,2-Tetrachloroethane	27.0	0.250	0.500	ug/L	1	20.0	ND	135	71-121%	---	---	Q-54c
Tetrachloroethene (PCE)	21.7	0.200	0.400	ug/L	1	20.0	1.71	100	74-129%	---	---	
Toluene	22.3	0.500	1.00	ug/L	1	20.0	ND	112	80-121%	---	---	
1,2,3-Trichlorobenzene	22.2	1.00	2.00	ug/L	1	20.0	ND	111	69-129%	---	---	
1,2,4-Trichlorobenzene	22.5	1.00	2.00	ug/L	1	20.0	ND	112	69-130%	---	---	
1,1,1-Trichloroethane	25.3	0.200	0.400	ug/L	1	20.0	ND	127	74-131%	---	---	
1,1,2-Trichloroethane	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
Trichloroethene (TCE)	19.6	0.200	0.400	ug/L	1	20.0	2.06	87	79-123%	---	---	
Trichlorofluoromethane	21.7	1.00	2.00	ug/L	1	20.0	ND	108	65-141%	---	---	
1,2,3-Trichloropropane	18.4	0.500	1.00	ug/L	1	20.0	ND	92	73-122%	---	---	
1,2,4-Trimethylbenzene	22.0	0.500	1.00	ug/L	1	20.0	ND	110	76-124%	---	---	
1,3,5-Trimethylbenzene	22.2	0.500	1.00	ug/L	1	20.0	ND	111	75-124%	---	---	
Vinyl chloride	21.7	0.200	0.400	ug/L	1	20.0	ND	109	58-137%	---	---	
m,p-Xylene	45.0	0.500	1.00	ug/L	1	40.0	ND	112	80-121%	---	---	
o-Xylene	22.4	0.250	0.500	ug/L	1	20.0	ND	112	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		95 %		80-120 %		"						

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
Blank (0070692-BLK1)			Prepared: 07/23/20 08:00		Analyzed: 07/23/20 13:12							
EPA 8260D												
Acetone	ND	10.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
Blank (0070692-BLK1)						Prepared: 07/23/20 08:00 Analyzed: 07/23/20 13:12						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 102 % Limits: 80-120 % Dilution: 1x												

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
Blank (0070692-BLK1)			Prepared: 07/23/20 08:00		Analyzed: 07/23/20 13:12							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
LCS (0070692-BS2)			Prepared: 07/23/20 08:00		Analyzed: 07/23/20 12:17							
EPA 8260D												
Acetone	35.6	10.0	20.0	ug/L	1	40.0	---	89	80-120%	---	---	
Acrylonitrile	20.4	1.00	2.00	ug/L	1	20.0	---	102	80-120%	---	---	
Benzene	19.8	0.100	0.200	ug/L	1	20.0	---	99	80-120%	---	---	
Bromobenzene	18.4	0.250	0.500	ug/L	1	20.0	---	92	80-120%	---	---	
Bromochloromethane	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
Bromodichloromethane	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Bromoform	19.3	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Bromomethane	14.4	5.00	5.00	ug/L	1	20.0	---	72	80-120%	---	---	Q-55
2-Butanone (MEK)	40.6	5.00	10.0	ug/L	1	40.0	---	102	80-120%	---	---	
n-Butylbenzene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
sec-Butylbenzene	21.4	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
tert-Butylbenzene	20.9	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
Carbon disulfide	19.4	5.00	10.0	ug/L	1	20.0	---	97	80-120%	---	---	E-05
Carbon tetrachloride	25.0	0.500	1.00	ug/L	1	20.0	---	125	80-120%	---	---	Q-56
Chlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Chloroethane	15.0	5.00	5.00	ug/L	1	20.0	---	75	80-120%	---	---	Q-55
Chloroform	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Chloromethane	25.3	2.50	5.00	ug/L	1	20.0	---	126	80-120%	---	---	Q-56
2-Chlorotoluene	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
4-Chlorotoluene	19.8	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Dibromochloromethane	19.6	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.4	5.00	10.0	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Dibromomethane	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2-Dichlorobenzene	19.0	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
1,3-Dichlorobenzene	19.7	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
1,4-Dichlorobenzene	18.3	0.250	0.500	ug/L	1	20.0	---	92	80-120%	---	---	
Dichlorodifluoromethane	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,1-Dichloroethane	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
LCS (0070692-BS2)						Prepared: 07/23/20 08:00 Analyzed: 07/23/20 12:17						
1,2-Dichloroethane (EDC)	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,1-Dichloroethene	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
cis-1,2-Dichloroethene	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	19.8	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
1,2-Dichloropropane	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
1,3-Dichloropropane	20.1	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
2,2-Dichloropropane	29.6	0.500	1.00	ug/L	1	20.0	---	148	80-120%	---	---	Q-56
1,1-Dichloropropene	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
cis-1,3-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
trans-1,3-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	---	107	80-120%	---	---	
Ethylbenzene	20.1	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Hexachlorobutadiene	20.7	2.50	5.00	ug/L	1	20.0	---	103	80-120%	---	---	
2-Hexanone	40.2	5.00	10.0	ug/L	1	40.0	---	101	80-120%	---	---	
Isopropylbenzene	21.8	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
4-Isopropyltoluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Methylene chloride	22.4	5.00	10.0	ug/L	1	20.0	---	112	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	41.0	5.00	10.0	ug/L	1	40.0	---	103	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	21.7	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Naphthalene	18.0	1.00	2.00	ug/L	1	20.0	---	90	80-120%	---	---	
n-Propylbenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Styrene	20.6	0.500	1.00	ug/L	1	20.0	---	103	80-120%	---	---	
1,1,1,2-Tetrachloroethane	20.0	0.400	0.800	ug/L	1	20.0	---	100	80-120%	---	---	
1,1,2,2-Tetrachloroethane	25.1	0.250	0.500	ug/L	1	20.0	---	126	80-120%	---	---	Q-56
Tetrachloroethene (PCE)	18.2	0.200	0.400	ug/L	1	20.0	---	91	80-120%	---	---	
Toluene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	20.7	1.00	2.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	21.0	1.00	2.00	ug/L	1	20.0	---	105	80-120%	---	---	
1,1,1-Trichloroethane	23.4	0.200	0.400	ug/L	1	20.0	---	117	80-120%	---	---	
1,1,2-Trichloroethane	19.8	0.250	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Trichloroethene (TCE)	16.2	0.200	0.400	ug/L	1	20.0	---	81	80-120%	---	---	
Trichlorofluoromethane	19.0	1.00	2.00	ug/L	1	20.0	---	95	80-120%	---	---	
1,2,3-Trichloropropane	18.2	0.500	1.00	ug/L	1	20.0	---	91	80-120%	---	---	
1,2,4-Trimethylbenzene	20.3	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
1,3,5-Trimethylbenzene	20.4	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	

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Philip Nerenberg, Lab Director

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
LCS (0070692-BS2)			Prepared: 07/23/20 08:00		Analyzed: 07/23/20 12:17							
Vinyl chloride	18.8	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
m,p-Xylene	40.7	0.500	1.00	ug/L	1	40.0	---	102	80-120%	---	---	
o-Xylene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		80-120 %		"						

Duplicate (0070692-DUP1)

Prepared: 07/23/20 10:53 Analyzed: 07/23/20 16:49

QC Source Sample: DP-16W-DUP (A0G0466-44)

Acetone	ND	10.0	20.0	ug/L	1	---	ND	---	---	---	30%
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%
Bromobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromoform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Bromomethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Chloroethane	ND	5.00	5.00	ug/L	1	---	ND	---	---	---	30%
Chloroform	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Chloromethane	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%
Dibromomethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
Duplicate (0070692-DUP1)			Prepared: 07/23/20 10:53		Analyzed: 07/23/20 16:49							
QC Source Sample: DP-16W-DUP (A0G0466-44)												
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	ND	---	---	---	30%	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Methylene chloride	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Styrene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.400	0.800	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
Duplicate (0070692-DUP1)			Prepared: 07/23/20 10:53 Analyzed: 07/23/20 16:49									
QC Source Sample: DP-16W-DUP (A0G0466-44)												
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		105 %		80-120 %		"						
Matrix Spike (0070692-MS1)			Prepared: 07/23/20 10:53 Analyzed: 07/23/20 18:38									
QC Source Sample: DP-19W (A0G0466-47)												
EPA 8260D												
Acetone	38.4	10.0	20.0	ug/L	1	40.0	ND	96	39-160%	---	---	
Acrylonitrile	20.3	1.00	2.00	ug/L	1	20.0	ND	101	63-135%	---	---	
Benzene	21.2	0.100	0.200	ug/L	1	20.0	ND	106	79-120%	---	---	
Bromobenzene	19.6	0.250	0.500	ug/L	1	20.0	ND	98	80-120%	---	---	
Bromochloromethane	21.9	0.500	1.00	ug/L	1	20.0	ND	109	78-123%	---	---	
Bromodichloromethane	22.3	0.500	1.00	ug/L	1	20.0	ND	112	79-125%	---	---	
Bromoform	20.0	0.500	1.00	ug/L	1	20.0	ND	100	66-130%	---	---	
Bromomethane	14.5	5.00	5.00	ug/L	1	20.0	ND	72	53-141%	---	---	Q-54l
2-Butanone (MEK)	39.9	5.00	10.0	ug/L	1	40.0	ND	100	56-143%	---	---	
n-Butylbenzene	22.3	0.500	1.00	ug/L	1	20.0	ND	112	75-128%	---	---	
sec-Butylbenzene	22.5	0.500	1.00	ug/L	1	20.0	ND	113	77-126%	---	---	
tert-Butylbenzene	22.1	0.500	1.00	ug/L	1	20.0	ND	110	78-124%	---	---	
Carbon disulfide	21.2	5.00	10.0	ug/L	1	20.0	ND	106	64-133%	---	---	E-05
Carbon tetrachloride	27.2	0.500	1.00	ug/L	1	20.0	ND	136	72-136%	---	---	Q-54h
Chlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80-120%	---	---	
Chloroethane	16.9	5.00	5.00	ug/L	1	20.0	ND	84	60-138%	---	---	Q-54k
Chloroform	21.2	0.500	1.00	ug/L	1	20.0	ND	106	79-124%	---	---	
Chloromethane	28.7	2.50	5.00	ug/L	1	20.0	ND	143	50-139%	---	---	Q-54i

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B						Water						
Matrix Spike (0070692-MS1)			Prepared: 07/23/20 10:53		Analyzed: 07/23/20 18:38							
QC Source Sample: DP-19W (A0G0466-47)												
2-Chlorotoluene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	79-122%	---	---	
4-Chlorotoluene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	78-122%	---	---	
Dibromochloromethane	20.6	0.500	1.00	ug/L	1	20.0	ND	103	74-126%	---	---	
1,2-Dibromo-3-chloropropane	19.9	5.00	10.0	ug/L	1	20.0	ND	99	62-128%	---	---	
1,2-Dibromoethane (EDB)	20.2	0.250	0.500	ug/L	1	20.0	ND	101	77-121%	---	---	
Dibromomethane	19.9	0.500	1.00	ug/L	1	20.0	ND	99	79-123%	---	---	
1,2-Dichlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80-120%	---	---	
1,3-Dichlorobenzene	20.6	0.250	0.500	ug/L	1	20.0	ND	103	80-120%	---	---	
1,4-Dichlorobenzene	19.2	0.250	0.500	ug/L	1	20.0	ND	96	79-120%	---	---	
Dichlorodifluoromethane	19.8	0.500	1.00	ug/L	1	20.0	ND	99	32-152%	---	---	
1,1-Dichloroethane	20.8	0.200	0.400	ug/L	1	20.0	ND	104	77-125%	---	---	
1,2-Dichloroethane (EDC)	20.4	0.200	0.400	ug/L	1	20.0	ND	102	73-128%	---	---	
1,1-Dichloroethene	20.3	0.200	0.400	ug/L	1	20.0	ND	102	71-131%	---	---	
cis-1,2-Dichloroethene	21.2	0.200	0.400	ug/L	1	20.0	ND	106	78-123%	---	---	
trans-1,2-Dichloroethene	21.0	0.200	0.400	ug/L	1	20.0	ND	105	75-124%	---	---	
1,2-Dichloropropane	20.7	0.250	0.500	ug/L	1	20.0	ND	104	78-122%	---	---	
1,3-Dichloropropane	21.0	0.500	1.00	ug/L	1	20.0	ND	105	80-120%	---	---	
2,2-Dichloropropane	24.8	0.500	1.00	ug/L	1	20.0	ND	124	60-139%	---	---	Q-54e
1,1-Dichloropropene	22.5	0.500	1.00	ug/L	1	20.0	ND	112	79-125%	---	---	
cis-1,3-Dichloropropene	20.2	0.500	1.00	ug/L	1	20.0	ND	101	75-124%	---	---	
trans-1,3-Dichloropropene	21.3	0.500	1.00	ug/L	1	20.0	ND	106	73-127%	---	---	
Ethylbenzene	21.5	0.250	0.500	ug/L	1	20.0	ND	107	79-121%	---	---	
Hexachlorobutadiene	20.7	2.50	5.00	ug/L	1	20.0	ND	104	66-134%	---	---	
2-Hexanone	40.5	5.00	10.0	ug/L	1	40.0	ND	101	57-139%	---	---	
Isopropylbenzene	23.2	0.500	1.00	ug/L	1	20.0	ND	116	72-131%	---	---	
4-Isopropyltoluene	22.8	0.500	1.00	ug/L	1	20.0	ND	114	77-127%	---	---	
Methylene chloride	20.8	5.00	10.0	ug/L	1	20.0	ND	104	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	40.8	5.00	10.0	ug/L	1	40.0	ND	102	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	21.8	0.500	1.00	ug/L	1	20.0	ND	109	71-124%	---	---	
Naphthalene	18.4	1.00	2.00	ug/L	1	20.0	ND	92	61-128%	---	---	
n-Propylbenzene	21.4	0.250	0.500	ug/L	1	20.0	ND	107	76-126%	---	---	
Styrene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	78-123%	---	---	
1,1,1,2-Tetrachloroethane	21.3	0.400	0.800	ug/L	1	20.0	ND	106	78-124%	---	---	

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070692 - EPA 5030B							Water					
Matrix Spike (0070692-MS1)			Prepared: 07/23/20 10:53		Analyzed: 07/23/20 18:38							
QC Source Sample: DP-19W (A0G0466-47)												
1,1,2,2-Tetrachloroethane	26.3	0.250	0.500	ug/L	1	20.0	ND	132	71-121%	---	---	Q-54i
Tetrachloroethene (PCE)	20.1	0.200	0.400	ug/L	1	20.0	ND	100	74-129%	---	---	
Toluene	21.5	0.500	1.00	ug/L	1	20.0	ND	108	80-121%	---	---	
1,2,3-Trichlorobenzene	22.4	1.00	2.00	ug/L	1	20.0	ND	112	69-129%	---	---	
1,2,4-Trichlorobenzene	21.9	1.00	2.00	ug/L	1	20.0	ND	110	69-130%	---	---	
1,1,1-Trichloroethane	25.7	0.200	0.400	ug/L	1	20.0	ND	128	74-131%	---	---	
1,1,2-Trichloroethane	21.0	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
Trichloroethene (TCE)	17.2	0.200	0.400	ug/L	1	20.0	ND	86	79-123%	---	---	
Trichlorofluoromethane	21.2	1.00	2.00	ug/L	1	20.0	ND	106	65-141%	---	---	
1,2,3-Trichloropropane	18.6	0.500	1.00	ug/L	1	20.0	ND	93	73-122%	---	---	
1,2,4-Trimethylbenzene	21.1	0.500	1.00	ug/L	1	20.0	ND	106	76-124%	---	---	
1,3,5-Trimethylbenzene	21.6	0.500	1.00	ug/L	1	20.0	ND	108	75-124%	---	---	
Vinyl chloride	20.7	0.200	0.400	ug/L	1	20.0	ND	104	58-137%	---	---	
m,p-Xylene	42.9	0.500	1.00	ug/L	1	40.0	ND	107	80-121%	---	---	
o-Xylene	21.5	0.250	0.500	ug/L	1	20.0	ND	108	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070726 - EPA 5030B						Water						
Blank (0070726-BLK1)			Prepared: 07/24/20 08:00		Analyzed: 07/24/20 14:25							
EPA 8260D SIM												
Benzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						

LCS (0070726-BS1)

Prepared: 07/24/20 08:00 Analyzed: 07/24/20 10:22

EPA 8260D SIM

Benzene	0.186	0.0500	0.100	ug/L	1	0.200	---	93	80-120%	---	---
Toluene	0.187	0.0500	0.100	ug/L	1	0.200	---	94	80-120%	---	---

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070726 - EPA 5030B						Water						
LCS (0070726-BS1)			Prepared: 07/24/20 08:00		Analyzed: 07/24/20 10:22							
Ethylbenzene	0.197	0.0500	0.100	ug/L	1	0.200	---	98	80-120%	---	---	
m,p-Xylene	0.398	0.100	0.200	ug/L	1	0.400	---	100	80-120%	---	---	
o-Xylene	0.192	0.0500	0.100	ug/L	1	0.200	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	0.187	0.0500	0.100	ug/L	1	0.200	---	94	80-120%	---	---	
1,3,5-Trimethylbenzene	0.190	0.0500	0.100	ug/L	1	0.200	---	95	80-120%	---	---	
Chloroform	0.177	0.0500	0.100	ug/L	1	0.200	---	89	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.187	0.100	0.200	ug/L	1	0.200	---	93	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.175	0.0100	0.0200	ug/L	1	0.200	---	87	80-120%	---	---	
1,1-Dichloroethane	0.178	0.0100	0.0200	ug/L	1	0.200	---	89	80-120%	---	---	
1,2-Dichloroethane (EDC)	0.173	0.0100	0.0200	ug/L	1	0.200	---	86	80-120%	---	---	
1,1-Dichloroethene	0.175	0.0100	0.0200	ug/L	1	0.200	---	87	80-120%	---	---	
cis-1,2-Dichloroethene	0.174	0.0100	0.0200	ug/L	1	0.200	---	87	80-120%	---	---	
trans-1,2-Dichloroethene	0.180	0.0100	0.0200	ug/L	1	0.200	---	90	80-120%	---	---	
1,2-Dichloropropane	0.176	0.0100	0.0200	ug/L	1	0.200	---	88	80-120%	---	---	
cis-1,3-Dichloropropene	0.172	0.0100	0.0200	ug/L	1	0.200	---	86	80-120%	---	---	
trans-1,3-Dichloropropene	0.177	0.0100	0.0200	ug/L	1	0.200	---	89	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.174	0.0100	0.0200	ug/L	1	0.200	---	87	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.175	0.0100	0.0200	ug/L	1	0.200	---	87	80-120%	---	---	
Tetrachloroethene (PCE)	0.209	0.0100	0.0200	ug/L	1	0.200	---	105	80-120%	---	---	
1,1,2-Trichloroethane	0.177	0.0100	0.0200	ug/L	1	0.200	---	88	80-120%	---	---	
Trichloroethene (TCE)	0.189	0.0100	0.0200	ug/L	1	0.200	---	94	80-120%	---	---	
1,2,3-Trichloropropane	0.161	0.0500	0.100	ug/L	1	0.200	---	80	80-120%	---	---	
Vinyl chloride	0.210	0.0100	0.0200	ug/L	1	0.200	---	105	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (0070726-DUP1)

Prepared: 07/24/20 12:29 Analyzed: 07/24/20 19:21

QC Source Sample: DP-19W (A0G0466-47)**EPA 8260D SIM**

Benzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
Toluene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
Ethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
m,p-Xylene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070726 - EPA 5030B						Water						
Duplicate (0070726-DUP1)			Prepared: 07/24/20 12:29		Analyzed: 07/24/20 19:21							
QC Source Sample: DP-19W (A0G0466-47)												
o-Xylene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	0.0216	0.0100	0.0200	ug/L	1	---	0.0215	---	---	0.5	30%	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						

Matrix Spike (0070726-MS1)

Prepared: 07/24/20 12:29 Analyzed: 07/24/20 19:48

QC Source Sample: DP-19W (A0G0466-47)**EPA 8260D SIM**

Benzene	0.202	0.0500	0.100	ug/L	1	0.200	ND	101	79-120%	---	---	
Toluene	0.212	0.0500	0.100	ug/L	1	0.200	ND	106	80-121%	---	---	
Ethylbenzene	0.210	0.0500	0.100	ug/L	1	0.200	ND	105	79-121%	---	---	
m,p-Xylene	0.409	0.100	0.200	ug/L	1	0.400	ND	102	80-121%	---	---	
o-Xylene	0.199	0.0500	0.100	ug/L	1	0.200	ND	99	78-122%	---	---	

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6700 S.W. Sandburg Street

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503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070726 - EPA 5030B						Water						
Matrix Spike (0070726-MS1)			Prepared: 07/24/20 12:29		Analyzed: 07/24/20 19:48							
QC Source Sample: DP-19W (A0G0466-47)												
1,2,4-Trimethylbenzene	0.203	0.0500	0.100	ug/L	1	0.200	ND	102	76-124%	---	---	
1,3,5-Trimethylbenzene	0.206	0.0500	0.100	ug/L	1	0.200	ND	103	75-124%	---	---	
Chloroform	0.193	0.0500	0.100	ug/L	1	0.200	ND	97	79-124%	---	---	
1,2-Dibromo-3-chloropropane	0.211	0.100	0.200	ug/L	1	0.200	ND	105	62-128%	---	---	
1,2-Dibromoethane (EDB)	0.195	0.0100	0.0200	ug/L	1	0.200	ND	97	77-121%	---	---	
1,1-Dichloroethane	0.188	0.0100	0.0200	ug/L	1	0.200	ND	94	77-125%	---	---	
1,2-Dichloroethane (EDC)	0.194	0.0100	0.0200	ug/L	1	0.200	ND	97	73-128%	---	---	
1,1-Dichloroethene	0.187	0.0100	0.0200	ug/L	1	0.200	ND	93	71-131%	---	---	
cis-1,2-Dichloroethene	0.190	0.0100	0.0200	ug/L	1	0.200	ND	95	78-123%	---	---	
trans-1,2-Dichloroethene	0.191	0.0100	0.0200	ug/L	1	0.200	ND	96	75-124%	---	---	
1,2-Dichloropropane	0.188	0.0100	0.0200	ug/L	1	0.200	ND	94	78-122%	---	---	
cis-1,3-Dichloropropene	0.186	0.0100	0.0200	ug/L	1	0.200	ND	93	75-124%	---	---	
trans-1,3-Dichloropropene	0.191	0.0100	0.0200	ug/L	1	0.200	ND	96	73-127%	---	---	
Methyl tert-butyl ether (MTBE)	0.204	0.0100	0.0200	ug/L	1	0.200	0.0215	91	71-124%	---	---	
1,1,2,2-Tetrachloroethane	0.210	0.0100	0.0200	ug/L	1	0.200	ND	105	71-121%	---	---	
Tetrachloroethene (PCE)	0.215	0.0100	0.0200	ug/L	1	0.200	ND	108	74-129%	---	---	
1,1,2-Trichloroethane	0.195	0.0100	0.0200	ug/L	1	0.200	ND	97	80-120%	---	---	
Trichloroethene (TCE)	0.191	0.0100	0.0200	ug/L	1	0.200	ND	96	79-123%	---	---	
1,2,3-Trichloropropane	0.182	0.0500	0.100	ug/L	1	0.200	ND	91	73-122%	---	---	
Vinyl chloride	0.218	0.0100	0.0200	ug/L	1	0.200	ND	109	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		100 %	Limits: 80-120 %		Dilution: 1x					
Toluene-d8 (Surr)				98 %	80-120 %		"					
4-Bromofluorobenzene (Surr)				98 %	80-120 %		"					

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070563 - EPA 3546						Soil						
Blank (0070563-BLK1)				Prepared: 07/20/20 10:43		Analyzed: 07/22/20 08:22		C-07				
EPA 8082A												
Aroclor 1016	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 103 %		Limits: 60-125 %		Dilution: 1x						
LCS (0070563-BS1)				Prepared: 07/20/20 10:43		Analyzed: 07/22/20 08:40		C-07				
EPA 8082A												
Aroclor 1016	177	2.00	4.00	ug/kg wet	1	250	---	71	47-134%	---	---	
Aroclor 1260	209	2.00	4.00	ug/kg wet	1	250	---	84	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 108 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (0070563-DUP1)				Prepared: 07/20/20 10:43		Analyzed: 07/22/20 12:13		C-07				
QC Source Sample: DP-14(0.5-1.5) (A0G0466-01RE1)												
EPA 8082A												
Aroclor 1016	ND	43.1	86.3	ug/kg dry	20	---	ND	---	---	---	30%	
Aroclor 1221	ND	43.1	86.3	ug/kg dry	20	---	ND	---	---	---	30%	
Aroclor 1232	ND	43.1	86.3	ug/kg dry	20	---	ND	---	---	---	30%	
Aroclor 1242	ND	43.1	86.3	ug/kg dry	20	---	ND	---	---	---	30%	
Aroclor 1248	ND	43.1	86.3	ug/kg dry	20	---	ND	---	---	---	30%	
Aroclor 1254	1550	43.1	86.3	ug/kg dry	20	---	830	---	---	60	30%	P-10, Q-17
Aroclor 1260	567	43.1	86.3	ug/kg dry	20	---	261	---	---	74	30%	P-10, Q-17
Surr: Decachlorobiphenyl (Surr)		Recovery: 127 %		Limits: 60-125 %		Dilution: 20x					S-05	
Matrix Spike (0070563-MS1)				Prepared: 07/20/20 10:43		Analyzed: 07/22/20 12:30		C-07				
QC Source Sample: Non-SDG (A0G0469-02)												
EPA 8082A												
Aroclor 1016	175	2.29	4.58	ug/kg dry	1	286	ND	61	47-134%	---	---	
Aroclor 1260	233	2.29	4.58	ug/kg dry	1	286	ND	82	53-140%	---	---	

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070563 - EPA 3546							Soil					
Matrix Spike (0070563-MS1)			Prepared: 07/20/20 10:43		Analyzed: 07/22/20 12:30		C-07					
QC Source Sample: Non-SDG (A0G0469-02)												
Surr: Decachlorobiphenyl (Surr)		Recovery: 100 %		Limits: 60-125 %		Dilution: 1x						

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070792 - EPA 3546						Soil						
Blank (0070792-BLK1)			Prepared: 07/27/20 11:24		Analyzed: 07/28/20 08:22		C-07					
EPA 8082A												
Aroclor 1016	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 104 %		Limits: 60-125 %		Dilution: 1x						
LCS (0070792-BS1)			Prepared: 07/27/20 11:24		Analyzed: 07/28/20 08:39		C-07					
EPA 8082A												
Aroclor 1016	154	2.00	4.00	ug/kg wet	1	250	---	61	47-134%	---	---	
Aroclor 1260	196	2.00	4.00	ug/kg wet	1	250	---	78	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 93 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (0070792-DUP1)			Prepared: 07/27/20 11:24		Analyzed: 07/28/20 09:32		C-07					
QC Source Sample: DP-15(2.5-3.5) (A0G0466-08RE2)												
EPA 8082A												
Aroclor 1016	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	2.03	4.05	ug/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 90 %		Limits: 60-125 %		Dilution: 1x						
Matrix Spike (0070792-MS1)			Prepared: 07/27/20 11:24		Analyzed: 07/28/20 13:05		C-07					
QC Source Sample: Non-SDG (A0G0677-08)												
EPA 8082A												
Aroclor 1016	747	28.8	57.6	ug/kg dry	1	1440	ND	52	47-134%	---	---	
Aroclor 1260	852	28.8	57.6	ug/kg dry	1	1440	ND	59	53-140%	---	---	

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070792 - EPA 3546							Soil					
Matrix Spike (0070792-MS1)			Prepared: 07/27/20 11:24 Analyzed: 07/28/20 13:05									C-07
<u>QC Source Sample: Non-SDG (A0G0677-08)</u>												
Surr: Decachlorobiphenyl (Surr)				Recovery: 74 %		Limits: 60-125 %		Dilution: 1x				

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0080022 - EPA 3510C (Neutral pH)						Water						
Blank (0080022-BLK1)			Prepared: 08/03/20 11:00				Analyzed: 08/05/20 16:32				C-07	
EPA 8082A												
Aroclor 1016	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 84 %		Limits: 40-135 %		Dilution: 1x						
LCS (0080022-BS1)			Prepared: 08/03/20 11:00				Analyzed: 08/05/20 16:50				C-07	
EPA 8082A												
Aroclor 1016	0.856	0.0100	0.0200	ug/L	1	1.25	---	68	46-129%	---	---	
Aroclor 1260	0.937	0.0100	0.0200	ug/L	1	1.25	---	75	45-134%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 82 %		Limits: 40-135 %		Dilution: 1x						
LCS Dup (0080022-BSD1)			Prepared: 08/03/20 11:00				Analyzed: 08/05/20 17:08				C-07, Q-19	
EPA 8082A												
Aroclor 1016	0.825	0.0100	0.0200	ug/L	1	1.25	---	66	46-129%	4	30%	
Aroclor 1260	0.939	0.0100	0.0200	ug/L	1	1.25	---	75	45-134%	0.2	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 83 %		Limits: 40-135 %		Dilution: 1x						

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070592 - EPA 3546						Soil						
Blank (0070592-BLK1)			Prepared: 07/21/20 07:02		Analyzed: 07/21/20 14:22							
EPA 8270E SIM												
Acenaphthene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	4.55	9.09	ug/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 92 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		98 %		54-127 %		"						

LCS (0070592-BS1)

Prepared: 07/21/20 07:02 Analyzed: 07/21/20 14:48

EPA 8270E SIM												
Acenaphthene	760	5.00	10.0	ug/kg wet	1	800	---	95	40-123%	---	---	
Acenaphthylene	757	5.00	10.0	ug/kg wet	1	800	---	95	32-132%	---	---	
Anthracene	807	5.00	10.0	ug/kg wet	1	800	---	101	47-123%	---	---	
Benz(a)anthracene	736	5.00	10.0	ug/kg wet	1	800	---	92	49-126%	---	---	
Benzo(a)pyrene	724	5.00	10.0	ug/kg wet	1	800	---	91	45-129%	---	---	
Benzo(b)fluoranthene	751	5.00	10.0	ug/kg wet	1	800	---	94	45-132%	---	---	
Benzo(k)fluoranthene	770	5.00	10.0	ug/kg wet	1	800	---	96	47-132%	---	---	
Benzo(g,h,i)perylene	736	5.00	10.0	ug/kg wet	1	800	---	92	43-134%	---	---	
Chrysene	771	5.00	10.0	ug/kg wet	1	800	---	96	50-124%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070592 - EPA 3546						Soil						
LCS (0070592-BS1)			Prepared: 07/21/20 07:02		Analyzed: 07/21/20 14:48							
Dibenz(a,h)anthracene	786	5.00	10.0	ug/kg wet	1	800	---	98	45-134%	---	---	
Fluoranthene	748	5.00	10.0	ug/kg wet	1	800	---	93	50-127%	---	---	
Fluorene	777	5.00	10.0	ug/kg wet	1	800	---	97	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	744	5.00	10.0	ug/kg wet	1	800	---	93	45-133%	---	---	
1-Methylnaphthalene	760	5.00	10.0	ug/kg wet	1	800	---	95	40-120%	---	---	
2-Methylnaphthalene	742	5.00	10.0	ug/kg wet	1	800	---	93	38-122%	---	---	
Naphthalene	745	5.00	10.0	ug/kg wet	1	800	---	93	35-123%	---	---	
Phenanthrene	792	5.00	10.0	ug/kg wet	1	800	---	99	50-121%	---	---	
Pyrene	754	5.00	10.0	ug/kg wet	1	800	---	94	47-127%	---	---	
Dibenzofuran	782	5.00	10.0	ug/kg wet	1	800	---	98	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 90 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		90 %		54-127 %		"						

Duplicate (0070592-DUP1)			Prepared: 07/21/20 07:02 Analyzed: 07/21/20 15:39								R-04
QC Source Sample: Non-SDG (A0G0256-13)											
Acenaphthene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Acenaphthylene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Anthracene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Benz(a)anthracene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Benzo(a)pyrene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Benzo(b)fluoranthene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Benzo(k)fluoranthene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Benzo(g,h,i)perylene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Chrysene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Dibenz(a,h)anthracene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Fluoranthene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Fluorene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Indeno(1,2,3-cd)pyrene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
1-Methylnaphthalene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
2-Methylnaphthalene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Naphthalene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Phenanthrene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Pyrene	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%
Dibenzofuran	ND	48.8	97.5	ug/kg dry	10	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070592 - EPA 3546						Soil						
Duplicate (0070592-DUP1)			Prepared: 07/21/20 07:02 Analyzed: 07/21/20 15:39						R-04			
QC Source Sample: Non-SDG (A0G0256-13)												
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 85 %		Limits: 44-120 %		Dilution: 10x						
p-Terphenyl-d14 (Surr)		93 %		54-127 %		"						
Matrix Spike (0070592-MS1)						Prepared: 07/21/20 07:02 Analyzed: 07/21/20 16:57						
QC Source Sample: DP-19(0.5-1.5) (A0G0466-30)												
EPA 8270E SIM												
Acenaphthene	869	5.78	11.6	ug/kg dry	1	924	ND	94	40-123%	---	---	
Acenaphthylene	866	5.78	11.6	ug/kg dry	1	924	ND	94	32-132%	---	---	
Anthracene	938	5.78	11.6	ug/kg dry	1	924	ND	101	47-123%	---	---	
Benz(a)anthracene	848	5.78	11.6	ug/kg dry	1	924	ND	92	49-126%	---	---	
Benzo(a)pyrene	839	5.78	11.6	ug/kg dry	1	924	ND	91	45-129%	---	---	
Benzo(b)fluoranthene	863	5.78	11.6	ug/kg dry	1	924	ND	93	45-132%	---	---	
Benzo(k)fluoranthene	902	5.78	11.6	ug/kg dry	1	924	ND	98	47-132%	---	---	
Benzo(g,h,i)perylene	835	5.78	11.6	ug/kg dry	1	924	ND	90	43-134%	---	---	
Chrysene	891	5.78	11.6	ug/kg dry	1	924	ND	96	50-124%	---	---	
Dibenz(a,h)anthracene	895	5.78	11.6	ug/kg dry	1	924	ND	97	45-134%	---	---	
Fluoranthene	861	5.78	11.6	ug/kg dry	1	924	ND	93	50-127%	---	---	
Fluorene	898	5.78	11.6	ug/kg dry	1	924	ND	97	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	846	5.78	11.6	ug/kg dry	1	924	ND	92	45-133%	---	---	
1-Methylnaphthalene	869	5.78	11.6	ug/kg dry	1	924	ND	94	40-120%	---	---	
2-Methylnaphthalene	857	5.78	11.6	ug/kg dry	1	924	ND	93	38-122%	---	---	
Naphthalene	857	5.78	11.6	ug/kg dry	1	924	ND	93	35-123%	---	---	
Phenanthrene	912	5.78	11.6	ug/kg dry	1	924	ND	99	50-121%	---	---	
Pyrene	871	5.78	11.6	ug/kg dry	1	924	ND	94	47-127%	---	---	
Dibenzofuran	890	5.78	11.6	ug/kg dry	1	924	ND	96	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 88 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		87 %		54-127 %		"						

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (0070683-BLK1)			Prepared: 07/23/20 07:12		Analyzed: 07/23/20 15:00							
EPA 8270E												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (0070683-BLK1)			Prepared: 07/23/20 07:12		Analyzed: 07/23/20 15:00							
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Benzoic acid	ND	1.14	2.27	ug/L	1	---	---	---	---	---	---	
Benzyl alcohol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (0070683-BLK1)			Prepared: 07/23/20 07:12		Analyzed: 07/23/20 15:00							
Azobenzene (1,2-DPH)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	Q-52
Bis(2-Ethylhexyl) adipate	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.455	0.909	ug/L	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
Pyridine	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			Recovery: 62 %		Limits: 44-120 %		Dilution: 1x					
2-Fluorobiphenyl (Surr)			61 %		44-120 %		"					
Phenol-d6 (Surr)			21 %		10-133 %		"					
p-Terphenyl-d14 (Surr)			80 %		50-134 %		"					
2-Fluorophenol (Surr)			34 %		19-120 %		"					
2,4,6-Tribromophenol (Surr)			86 %		43-140 %		"					
LCS (0070683-BS1)			Prepared: 07/23/20 07:12		Analyzed: 07/23/20 15:34							
EPA 8270E												
Acenaphthene	3.26	0.0400	0.0800	ug/L	4	4.00	---	81	47-122%	---	---	
Acenaphthylene	3.25	0.0400	0.0800	ug/L	4	4.00	---	81	41-130%	---	---	
Anthracene	3.88	0.0400	0.0800	ug/L	4	4.00	---	97	57-123%	---	---	
Benz(a)anthracene	3.87	0.0400	0.0800	ug/L	4	4.00	---	97	58-125%	---	---	
Benzo(a)pyrene	4.11	0.0600	0.120	ug/L	4	4.00	---	103	54-128%	---	---	
Benzo(b)fluoranthene	4.19	0.0600	0.120	ug/L	4	4.00	---	105	53-131%	---	---	
Benzo(k)fluoranthene	4.38	0.0600	0.120	ug/L	4	4.00	---	109	57-129%	---	---	
Benzo(g,h,i)perylene	3.79	0.0400	0.0800	ug/L	4	4.00	---	95	50-134%	---	---	
Chrysene	3.94	0.0400	0.0800	ug/L	4	4.00	---	98	59-123%	---	---	
Dibenz(a,h)anthracene	4.10	0.0400	0.0800	ug/L	4	4.00	---	103	51-134%	---	---	
Fluoranthene	3.95	0.0400	0.0800	ug/L	4	4.00	---	99	57-128%	---	---	
Fluorene	3.55	0.0400	0.0800	ug/L	4	4.00	---	89	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.72	0.0400	0.0800	ug/L	4	4.00	---	93	52-134%	---	---	
1-Methylnaphthalene	2.81	0.0800	0.160	ug/L	4	4.00	---	70	41-120%	---	---	
2-Methylnaphthalene	2.74	0.0800	0.160	ug/L	4	4.00	---	68	40-121%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (0070683-BS1)			Prepared: 07/23/20 07:12		Analyzed: 07/23/20 15:34							
Naphthalene	2.60	0.0800	0.160	ug/L	4	4.00	---	65	40-121%	---	---	Q-41
Phenanthrene	3.80	0.0400	0.0800	ug/L	4	4.00	---	95	59-120%	---	---	
Pyrene	4.00	0.0400	0.0800	ug/L	4	4.00	---	100	57-126%	---	---	
Carbazole	4.86	0.0600	0.120	ug/L	4	4.00	---	121	60-122%	---	---	
Dibenzofuran	3.45	0.0400	0.0800	ug/L	4	4.00	---	86	53-120%	---	---	
2-Chlorophenol	3.17	0.200	0.400	ug/L	4	4.00	---	79	38-120%	---	---	
4-Chloro-3-methylphenol	3.51	0.400	0.800	ug/L	4	4.00	---	88	52-120%	---	---	
2,4-Dichlorophenol	3.61	0.200	0.400	ug/L	4	4.00	---	90	47-121%	---	---	
2,4-Dimethylphenol	3.13	0.200	0.400	ug/L	4	4.00	---	78	31-124%	---	---	
2,4-Dinitrophenol	3.29	1.00	2.00	ug/L	4	4.00	---	82	23-143%	---	---	
4,6-Dinitro-2-methylphenol	3.72	1.00	2.00	ug/L	4	4.00	---	93	44-137%	---	---	
2-Methylphenol	2.91	0.100	0.200	ug/L	4	4.00	---	73	30-120%	---	---	
3+4-Methylphenol(s)	2.74	0.100	0.200	ug/L	4	4.00	---	69	29-120%	---	---	
2-Nitrophenol	3.81	0.400	0.800	ug/L	4	4.00	---	95	47-123%	---	---	
4-Nitrophenol	1.37	0.400	0.800	ug/L	4	4.00	---	34	10-120%	---	---	
Pentachlorophenol (PCP)	3.35	0.400	0.800	ug/L	4	4.00	---	84	35-138%	---	---	
Phenol	1.37	0.800	0.800	ug/L	4	4.00	---	34	10-120%	---	---	
2,3,4,6-Tetrachlorophenol	3.98	0.200	0.400	ug/L	4	4.00	---	100	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	3.77	0.200	0.400	ug/L	4	4.00	---	94	50-121%	---	---	
2,4,5-Trichlorophenol	3.94	0.200	0.400	ug/L	4	4.00	---	99	53-123%	---	---	
Nitrobenzene	2.94	0.400	0.800	ug/L	4	4.00	---	73	45-121%	---	---	
2,4,6-Trichlorophenol	3.91	0.200	0.400	ug/L	4	4.00	---	98	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	4.10	0.800	1.60	ug/L	4	4.00	---	103	55-135%	---	---	
Butyl benzyl phthalate	4.22	0.800	1.60	ug/L	4	4.00	---	106	53-134%	---	---	
Diethylphthalate	3.50	0.800	1.60	ug/L	4	4.00	---	87	56-125%	---	---	
Dimethylphthalate	3.99	0.800	1.60	ug/L	4	4.00	---	100	45-127%	---	---	
Di-n-butylphthalate	4.24	0.800	1.60	ug/L	4	4.00	---	106	59-127%	---	---	
Di-n-octyl phthalate	4.19	0.800	1.60	ug/L	4	4.00	---	105	51-140%	---	---	
N-Nitrosodimethylamine	1.85	0.100	0.200	ug/L	4	4.00	---	46	10-120%	---	---	
N-Nitroso-di-n-propylamine	3.11	0.100	0.200	ug/L	4	4.00	---	78	49-120%	---	---	
N-Nitrosodiphenylamine	3.90	0.100	0.200	ug/L	4	4.00	---	97	51-123%	---	---	
Bis(2-Chloroethoxy) methane	3.41	0.100	0.200	ug/L	4	4.00	---	85	48-120%	---	---	
Bis(2-Chloroethyl) ether	2.72	0.100	0.200	ug/L	4	4.00	---	68	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	2.44	0.100	0.200	ug/L	4	4.00	---	61	37-130%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (0070683-BS1)						Prepared: 07/23/20 07:12 Analyzed: 07/23/20 15:34						
Hexachlorobenzene	3.77	0.0400	0.0800	ug/L	4	4.00	---	94	53-125%	---	---	
Hexachlorobutadiene	1.95	0.100	0.200	ug/L	4	4.00	---	49	22-124%	---	---	
Hexachlorocyclopentadiene	1.38	0.200	0.400	ug/L	4	4.00	---	34	10-127%	---	---	
Hexachloroethane	1.75	0.100	0.200	ug/L	4	4.00	---	44	21-120%	---	---	
2-Chloronaphthalene	3.09	0.0400	0.0800	ug/L	4	4.00	---	77	40-120%	---	---	
1,2,4-Trichlorobenzene	2.28	0.100	0.200	ug/L	4	4.00	---	57	29-120%	---	---	
4-Bromophenyl phenyl ether	3.75	0.100	0.200	ug/L	4	4.00	---	94	55-124%	---	---	
4-Chlorophenyl phenyl ether	3.39	0.100	0.200	ug/L	4	4.00	---	85	53-121%	---	---	
Aniline	2.47	0.200	0.400	ug/L	4	4.00	---	62	10-120%	---	---	
4-Chloroaniline	3.48	0.100	0.200	ug/L	4	4.00	---	87	33-120%	---	---	
2-Nitroaniline	3.89	0.800	1.60	ug/L	4	4.00	---	97	55-127%	---	---	
3-Nitroaniline	4.06	0.800	1.60	ug/L	4	4.00	---	102	41-128%	---	---	Q-41
4-Nitroaniline	4.22	0.800	1.60	ug/L	4	4.00	---	106	54-128%	---	---	Q-41
2,4-Dinitrotoluene	3.92	0.400	0.800	ug/L	4	4.00	---	98	57-128%	---	---	
2,6-Dinitrotoluene	3.78	0.400	0.800	ug/L	4	4.00	---	94	57-124%	---	---	
Benzoic acid	4.55	4.00	4.00	ug/L	4	8.00	---	57	10-120%	---	---	
Benzyl alcohol	2.69	0.400	0.800	ug/L	4	4.00	---	67	31-120%	---	---	
Isophorone	3.23	0.100	0.200	ug/L	4	4.00	---	81	42-124%	---	---	
Azobenzene (1,2-DPH)	3.46	0.100	0.200	ug/L	4	4.00	---	86	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	3.87	1.00	2.00	ug/L	4	4.00	---	97	57-136%	---	---	
3,3'-Dichlorobenzidine	18.8	2.00	4.00	ug/L	4	8.00	---	235	27-129%	---	---	Q-29, Q-41
1,2-Dinitrobenzene	3.67	1.00	2.00	ug/L	4	4.00	---	92	59-120%	---	---	
1,3-Dinitrobenzene	3.44	1.00	2.00	ug/L	4	4.00	---	86	49-128%	---	---	
1,4-Dinitrobenzene	3.90	1.00	2.00	ug/L	4	4.00	---	97	72-130%	---	---	
Pyridine	1.54	0.400	0.800	ug/L	4	4.00	---	39	10-120%	---	---	
1,2-Dichlorobenzene	2.02	0.100	0.200	ug/L	4	4.00	---	50	32-120%	---	---	
1,3-Dichlorobenzene	1.91	0.100	0.200	ug/L	4	4.00	---	48	28-120%	---	---	
1,4-Dichlorobenzene	1.93	0.100	0.200	ug/L	4	4.00	---	48	29-120%	---	---	
<i>Surr: Nitrobenzene-d5 (Surr)</i>												
			Recovery: 72 %	Limits: 44-120 %	Dilution: 4x							
<i>2-Fluorobiphenyl (Surr)</i>			82 %	44-120 %	"							
<i>Phenol-d6 (Surr)</i>			29 %	10-133 %	"							
<i>p-Terphenyl-d14 (Surr)</i>			99 %	50-134 %	"							
<i>2-Fluorophenol (Surr)</i>			46 %	19-120 %	"							
<i>2,4,6-Tribromophenol (Surr)</i>			103 %	43-140 %	"							

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (0070683-BSD1)			Prepared: 07/23/20 07:12 Analyzed: 07/23/20 16:08					Q-19				
EPA 8270E												
Acenaphthene	3.48	0.0400	0.0800	ug/L	4	4.00	---	87	47-122%	7	30%	
Acenaphthylene	3.52	0.0400	0.0800	ug/L	4	4.00	---	88	41-130%	8	30%	
Anthracene	3.91	0.0400	0.0800	ug/L	4	4.00	---	98	57-123%	0.7	30%	
Benz(a)anthracene	3.82	0.0400	0.0800	ug/L	4	4.00	---	95	58-125%	1	30%	
Benzo(a)pyrene	4.13	0.0600	0.120	ug/L	4	4.00	---	103	54-128%	0.3	30%	
Benzo(b)fluoranthene	4.14	0.0600	0.120	ug/L	4	4.00	---	103	53-131%	1	30%	
Benzo(k)fluoranthene	4.36	0.0600	0.120	ug/L	4	4.00	---	109	57-129%	0.4	30%	
Benzo(g,h,i)perylene	3.79	0.0400	0.0800	ug/L	4	4.00	---	95	50-134%	0.06	30%	
Chrysene	3.85	0.0400	0.0800	ug/L	4	4.00	---	96	59-123%	2	30%	
Dibenz(a,h)anthracene	4.04	0.0400	0.0800	ug/L	4	4.00	---	101	51-134%	1	30%	
Fluoranthene	3.93	0.0400	0.0800	ug/L	4	4.00	---	98	57-128%	0.5	30%	
Fluorene	3.65	0.0400	0.0800	ug/L	4	4.00	---	91	52-124%	3	30%	
Indeno(1,2,3-cd)pyrene	3.74	0.0400	0.0800	ug/L	4	4.00	---	93	52-134%	0.4	30%	
1-Methylnaphthalene	3.18	0.0800	0.160	ug/L	4	4.00	---	80	41-120%	12	30%	
2-Methylnaphthalene	3.21	0.0800	0.160	ug/L	4	4.00	---	80	40-121%	16	30%	
Naphthalene	2.99	0.0800	0.160	ug/L	4	4.00	---	75	40-121%	14	30%	
Phenanthrene	3.80	0.0400	0.0800	ug/L	4	4.00	---	95	59-120%	0.1	30%	
Pyrene	3.93	0.0400	0.0800	ug/L	4	4.00	---	98	57-126%	2	30%	
Carbazole	4.76	0.0600	0.120	ug/L	4	4.00	---	119	60-122%	2	30%	Q-41
Dibenzofuran	3.60	0.0400	0.0800	ug/L	4	4.00	---	90	53-120%	4	30%	
2-Chlorophenol	3.18	0.200	0.400	ug/L	4	4.00	---	80	38-120%	0.6	30%	
4-Chloro-3-methylphenol	3.45	0.400	0.800	ug/L	4	4.00	---	86	52-120%	2	30%	
2,4-Dichlorophenol	3.68	0.200	0.400	ug/L	4	4.00	---	92	47-121%	2	30%	
2,4-Dimethylphenol	2.83	0.200	0.400	ug/L	4	4.00	---	71	31-124%	10	30%	
2,4-Dinitrophenol	3.26	1.00	2.00	ug/L	4	4.00	---	82	23-143%	1	30%	
4,6-Dinitro-2-methylphenol	3.82	1.00	2.00	ug/L	4	4.00	---	96	44-137%	3	30%	
2-Methylphenol	2.86	0.100	0.200	ug/L	4	4.00	---	71	30-120%	2	30%	
3+4-Methylphenol(s)	2.61	0.100	0.200	ug/L	4	4.00	---	65	29-120%	5	30%	
2-Nitrophenol	3.57	0.400	0.800	ug/L	4	4.00	---	89	47-123%	7	30%	
4-Nitrophenol	1.26	0.400	0.800	ug/L	4	4.00	---	31	10-120%	9	30%	
Pentachlorophenol (PCP)	3.27	0.400	0.800	ug/L	4	4.00	---	82	35-138%	2	30%	
Phenol	1.34	0.800	0.800	ug/L	4	4.00	---	33	10-120%	2	30%	
2,3,4,6-Tetrachlorophenol	3.92	0.200	0.400	ug/L	4	4.00	---	98	50-128%	2	30%	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (0070683-BSD1)						Prepared: 07/23/20 07:12 Analyzed: 07/23/20 16:08					Q-19	
2,3,5,6-Tetrachlorophenol	3.86	0.200	0.400	ug/L	4	4.00	---	96	50-121%	2	30%	
2,4,5-Trichlorophenol	4.04	0.200	0.400	ug/L	4	4.00	---	101	53-123%	2	30%	
Nitrobenzene	3.15	0.400	0.800	ug/L	4	4.00	---	79	45-121%	7	30%	
2,4,6-Trichlorophenol	4.00	0.200	0.400	ug/L	4	4.00	---	100	50-125%	2	30%	
Bis(2-ethylhexyl)phthalate	4.02	0.800	1.60	ug/L	4	4.00	---	100	55-135%	2	30%	
Butyl benzyl phthalate	4.06	0.800	1.60	ug/L	4	4.00	---	101	53-134%	4	30%	
Diethylphthalate	3.49	0.800	1.60	ug/L	4	4.00	---	87	56-125%	0.4	30%	
Dimethylphthalate	3.93	0.800	1.60	ug/L	4	4.00	---	98	45-127%	1	30%	
Di-n-butylphthalate	4.22	0.800	1.60	ug/L	4	4.00	---	105	59-127%	0.5	30%	
Di-n-octyl phthalate	4.13	0.800	1.60	ug/L	4	4.00	---	103	51-140%	1	30%	
N-Nitrosodimethylamine	1.85	0.100	0.200	ug/L	4	4.00	---	46	10-120%	0.4	30%	
N-Nitroso-di-n-propylamine	3.18	0.100	0.200	ug/L	4	4.00	---	79	49-120%	2	30%	
N-Nitrosodiphenylamine	3.85	0.100	0.200	ug/L	4	4.00	---	96	51-123%	1	30%	
Bis(2-Chloroethoxy) methane	3.48	0.100	0.200	ug/L	4	4.00	---	87	48-120%	2	30%	
Bis(2-Chloroethyl) ether	2.79	0.100	0.200	ug/L	4	4.00	---	70	43-120%	2	30%	
2,2'-Oxybis(1-Chloropropane)	2.66	0.100	0.200	ug/L	4	4.00	---	66	37-130%	8	30%	
Hexachlorobenzene	3.82	0.0400	0.0800	ug/L	4	4.00	---	95	53-125%	1	30%	
Hexachlorobutadiene	2.46	0.100	0.200	ug/L	4	4.00	---	62	22-124%	23	30%	
Hexachlorocyclopentadiene	1.96	0.200	0.400	ug/L	4	4.00	---	49	10-127%	35	30%	Q-24
Hexachloroethane	2.35	0.100	0.200	ug/L	4	4.00	---	59	21-120%	29	30%	
2-Chloronaphthalene	3.46	0.0400	0.0800	ug/L	4	4.00	---	86	40-120%	11	30%	
1,2,4-Trichlorobenzene	2.76	0.100	0.200	ug/L	4	4.00	---	69	29-120%	19	30%	
4-Bromophenyl phenyl ether	3.89	0.100	0.200	ug/L	4	4.00	---	97	55-124%	4	30%	
4-Chlorophenyl phenyl ether	3.59	0.100	0.200	ug/L	4	4.00	---	90	53-121%	6	30%	
Aniline	2.62	0.200	0.400	ug/L	4	4.00	---	65	10-120%	6	30%	
4-Chloroaniline	3.60	0.100	0.200	ug/L	4	4.00	---	90	33-120%	4	30%	
2-Nitroaniline	4.04	0.800	1.60	ug/L	4	4.00	---	101	55-127%	4	30%	
3-Nitroaniline	3.92	0.800	1.60	ug/L	4	4.00	---	98	41-128%	4	30%	Q-41
4-Nitroaniline	4.07	0.800	1.60	ug/L	4	4.00	---	102	54-128%	4	30%	Q-41
2,4-Dinitrotoluene	3.92	0.400	0.800	ug/L	4	4.00	---	98	57-128%	0.01	30%	
2,6-Dinitrotoluene	3.79	0.400	0.800	ug/L	4	4.00	---	95	57-124%	0.2	30%	
Benzoic acid	4.44	4.00	4.00	ug/L	4	8.00	---	56	10-120%	2	30%	
Benzyl alcohol	2.66	0.400	0.800	ug/L	4	4.00	---	67	31-120%	1	30%	
Isophorone	3.28	0.100	0.200	ug/L	4	4.00	---	82	42-124%	2	30%	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070683 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (0070683-BSD1)			Prepared: 07/23/20 07:12		Analyzed: 07/23/20 16:08		Q-19					
Azobenzene (1,2-DPH)	3.49	0.100	0.200	ug/L	4	4.00	---	87	61-120%	1	30%	Q-29, Q-41
Bis(2-Ethylhexyl) adipate	3.67	1.00	2.00	ug/L	4	4.00	---	92	57-136%	5	30%	
3,3'-Dichlorobenzidine	17.5	2.00	4.00	ug/L	4	8.00	---	219	27-129%	7	30%	
1,2-Dinitrobenzene	3.76	1.00	2.00	ug/L	4	4.00	---	94	59-120%	2	30%	
1,3-Dinitrobenzene	3.63	1.00	2.00	ug/L	4	4.00	---	91	49-128%	5	30%	
1,4-Dinitrobenzene	3.87	1.00	2.00	ug/L	4	4.00	---	97	72-130%	0.7	30%	
Pyridine	1.64	0.400	0.800	ug/L	4	4.00	---	41	10-120%	6	30%	
1,2-Dichlorobenzene	2.53	0.100	0.200	ug/L	4	4.00	---	63	32-120%	22	30%	
1,3-Dichlorobenzene	2.39	0.100	0.200	ug/L	4	4.00	---	60	28-120%	22	30%	
1,4-Dichlorobenzene	2.46	0.100	0.200	ug/L	4	4.00	---	62	29-120%	24	30%	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 74 %		Limits: 44-120 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		85 %		44-120 %		"						
Phenol-d6 (Surr)		28 %		10-133 %		"						
p-Terphenyl-d14 (Surr)		97 %		50-134 %		"						
2-Fluorophenol (Surr)		45 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		100 %		43-140 %		"						

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070667 - EPA 3051A						Soil						
Blank (0070667-BLK1)				Prepared: 07/22/20 13:40 Analyzed: 07/23/20 13:50								
EPA 6020A												
Antimony	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	0.962	1.92	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	0.0385	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	1.92	3.85	mg/kg wet	10	---	---	---	---	---	---	
LCS (0070667-BS1)				Prepared: 07/22/20 13:40 Analyzed: 07/23/20 13:55								
EPA 6020A												
Antimony	24.6	0.500	1.00	mg/kg wet	10	25.0	---	98	80-120%	---	---	
Arsenic	46.4	0.500	1.00	mg/kg wet	10	50.0	---	93	80-120%	---	---	
Barium	49.7	0.500	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Cadmium	49.9	0.100	0.200	mg/kg wet	10	50.0	---	100	80-120%	---	---	
Chromium	47.3	0.500	1.00	mg/kg wet	10	50.0	---	95	80-120%	---	---	
Copper	50.9	1.00	2.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Lead	52.6	0.100	0.200	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Mercury	1.03	0.0400	0.0800	mg/kg wet	10	1.00	---	103	80-120%	---	---	
Selenium	25.9	0.500	1.00	mg/kg wet	10	25.0	---	104	80-120%	---	---	
Silver	26.0	0.100	0.200	mg/kg wet	10	25.0	---	104	80-120%	---	---	
Zinc	49.3	2.00	4.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Duplicate (0070667-DUP1)				Prepared: 07/22/20 13:40 Analyzed: 07/23/20 14:21								
QC Source Sample: Non-SDG (A0G0346-03)												
Antimony	ND	0.695	1.39	mg/kg dry	10	---	ND	---	---	---	20%	
Arsenic	6.72	0.695	1.39	mg/kg dry	10	---	6.93	---	---	3	20%	
Barium	173	0.695	1.39	mg/kg dry	10	---	176	---	---	2	20%	
Cadmium	ND	0.139	0.278	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	22.1	0.695	1.39	mg/kg dry	10	---	23.2	---	---	5	20%	

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070667 - EPA 3051A						Soil						
Duplicate (0070667-DUP1)			Prepared: 07/22/20 13:40		Analyzed: 07/23/20 14:21							
QC Source Sample: Non-SDG (A0G0346-03)												
Copper	27.3	1.39	2.78	mg/kg dry	10	---	29.0	---	---	6	20%	
Lead	11.0	0.139	0.278	mg/kg dry	10	---	11.0	---	---	0.2	20%	
Mercury	ND	0.0556	0.111	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	0.695	1.39	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	0.139	0.278	mg/kg dry	10	---	ND	---	---	---	20%	
Zinc	71.1	2.78	5.56	mg/kg dry	10	---	74.1	---	---	4	20%	

Matrix Spike (0070667-MS1)

Prepared: 07/22/20 13:40 Analyzed: 07/23/20 14:26

QC Source Sample: Non-SDG (A0G0346-03)**EPA 6020A**

Antimony	28.0	0.674	1.35	mg/kg dry	10	33.7	ND	83	75-125%	---	---	
Arsenic	67.3	0.674	1.35	mg/kg dry	10	67.4	6.93	90	75-125%	---	---	
Barium	236	0.674	1.35	mg/kg dry	10	67.4	176	89	75-125%	---	---	
Cadmium	65.6	0.135	0.270	mg/kg dry	10	67.4	ND	97	75-125%	---	---	
Chromium	86.7	0.674	1.35	mg/kg dry	10	67.4	23.2	94	75-125%	---	---	
Copper	93.8	1.35	2.70	mg/kg dry	10	67.4	29.0	96	75-125%	---	---	
Lead	75.5	0.135	0.270	mg/kg dry	10	67.4	11.0	96	75-125%	---	---	
Mercury	1.35	0.0539	0.108	mg/kg dry	10	1.35	ND	100	75-125%	---	---	
Selenium	32.7	0.674	1.35	mg/kg dry	10	33.7	ND	97	75-125%	---	---	
Silver	33.9	0.135	0.270	mg/kg dry	10	33.7	ND	101	75-125%	---	---	
Zinc	138	2.70	5.39	mg/kg dry	10	67.4	74.1	95	75-125%	---	---	

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070702 - EPA 3015A												
Water												
Blank (0070702-BLK1)												
Prepared: 07/23/20 11:35 Analyzed: 07/24/20 01:36												
<u>EPA 6020A</u>												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Copper	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Blank (0070702-BLK2)												
Prepared: 07/23/20 11:35 Analyzed: 07/24/20 21:47												
<u>EPA 6020A</u>												
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	Q-16
LCS (0070702-BS1)												
Prepared: 07/23/20 11:35 Analyzed: 07/24/20 01:47												
<u>EPA 6020A</u>												
Arsenic	55.5	0.500	1.00	ug/L	1	55.6	---	100	80-120%	---	---	
Cadmium	55.5	0.100	0.200	ug/L	1	55.6	---	100	80-120%	---	---	
Copper	60.2	1.00	2.00	ug/L	1	55.6	---	108	80-120%	---	---	
Lead	57.4	0.100	0.200	ug/L	1	55.6	---	103	80-120%	---	---	
Mercury	1.14	0.0400	0.0800	ug/L	1	1.11	---	102	80-120%	---	---	
LCS (0070702-BS2)												
Prepared: 07/23/20 11:35 Analyzed: 07/24/20 21:53												
<u>EPA 6020A</u>												
Zinc	54.8	2.00	4.00	ug/L	1	55.6	---	99	80-120%	---	---	Q-16
Duplicate (0070702-DUP1)												
Prepared: 07/23/20 11:35 Analyzed: 07/24/20 01:58												
<u>QC Source Sample: Non-SDG (A0G0389-06)</u>												
Arsenic	2.98	0.500	1.00	ug/L	1	---	2.95	---	---	0.8	20%	
Cadmium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Copper	1.21	1.00	2.00	ug/L	1	---	1.17	---	---	3	20%	J
Lead	0.673	0.100	0.200	ug/L	1	---	0.700	---	---	4	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Duplicate (0070702-DUP2)												
Prepared: 07/23/20 11:35 Analyzed: 07/24/20 22:03												
<u>QC Source Sample: Non-SDG (A0G0389-06RE1)</u>												

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070702 - EPA 3015A						Water						
Duplicate (0070702-DUP2)			Prepared: 07/23/20 11:35 Analyzed: 07/24/20 22:03									
QC Source Sample: Non-SDG (A0G0389-06RE1)												
Zinc	3.40	2.00	4.00	ug/L	1	---	3.45	---	---	1	20%	Q-16, J
Matrix Spike (0070702-MS1)			Prepared: 07/23/20 11:35 Analyzed: 07/24/20 02:03									
QC Source Sample: Non-SDG (A0G0389-06)												
EPA 6020A												
Arsenic	59.0	0.500	1.00	ug/L	1	55.6	2.95	101	75-125%	---	---	
Cadmium	56.0	0.100	0.200	ug/L	1	55.6	ND	101	75-125%	---	---	
Copper	59.5	1.00	2.00	ug/L	1	55.6	1.17	105	75-125%	---	---	
Lead	56.6	0.100	0.200	ug/L	1	55.6	0.700	101	75-125%	---	---	
Mercury	1.14	0.0400	0.0800	ug/L	1	1.11	ND	103	75-125%	---	---	
Matrix Spike (0070702-MS2)			Prepared: 07/23/20 11:35 Analyzed: 07/24/20 22:09									
QC Source Sample: Non-SDG (A0G0389-06RE1)												
EPA 6020A												
Zinc	58.3	2.00	4.00	ug/L	1	55.6	3.45	99	75-125%	---	---	Q-16

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****QUALITY CONTROL (QC) SAMPLE RESULTS****Dissolved Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070665 - Matrix Matched Direct Inject												
Water												
Blank (0070665-BLK1)												
Prepared: 07/22/20 13:31 Analyzed: 07/22/20 14:25												
<u>EPA 6020A (Diss)</u>												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Blank (0070665-BLK2)												
Prepared: 07/22/20 13:31 Analyzed: 07/23/20 12:22												
<u>EPA 6020A (Diss)</u>												
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	Q-16
LCS (0070665-BS1)												
Prepared: 07/22/20 13:31 Analyzed: 07/22/20 14:40												
<u>EPA 6020A (Diss)</u>												
Arsenic	51.6	0.500	1.00	ug/L	1	55.6	---	93	80-120%	---	---	
Copper	56.1	1.00	2.00	ug/L	1	55.6	---	101	80-120%	---	---	
Lead	52.6	0.100	0.200	ug/L	1	55.6	---	95	80-120%	---	---	
Mercury	1.14	0.0400	0.0800	ug/L	1	1.11	---	102	80-120%	---	---	
LCS (0070665-BS2)												
Prepared: 07/22/20 13:31 Analyzed: 07/23/20 12:27												
<u>EPA 6020A (Diss)</u>												
Zinc	53.7	2.00	4.00	ug/L	1	55.6	---	97	80-120%	---	---	Q-16
Duplicate (0070665-DUP1)												
Prepared: 07/22/20 13:31 Analyzed: 07/22/20 15:06												
<u>QC Source Sample: DP-16W-DUP (A0G0466-44)</u>												
Arsenic	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Copper	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	
Lead	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Duplicate (0070665-DUP2)												
Prepared: 07/22/20 13:31 Analyzed: 07/23/20 12:47												
<u>QC Source Sample: DP-16W-DUP (A0G0466-44RE1)</u>												
Zinc	ND	2.00	4.00	ug/L	1	---	ND	---	---	---	20%	Q-16
Matrix Spike (0070665-MS1)												
Prepared: 07/22/20 13:31 Analyzed: 07/22/20 15:11												

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

QUALITY CONTROL (QC) SAMPLE RESULTS**Dissolved Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0070665 - Matrix Matched Direct Inject						Water						
Matrix Spike (0070665-MS1)			Prepared: 07/22/20 13:31		Analyzed: 07/22/20 15:11							
QC Source Sample: DP-16W-DUP (A0G0466-44)												
Arsenic	53.1	0.500	1.00	ug/L	1	55.6	ND	96	75-125%	---	---	
Copper	53.7	1.00	2.00	ug/L	1	55.6	ND	97	75-125%	---	---	
Lead	52.5	0.100	0.200	ug/L	1	55.6	ND	95	75-125%	---	---	
Mercury	1.12	0.0400	0.0800	ug/L	1	1.11	ND	101	75-125%	---	---	
Matrix Spike (0070665-MS2)			Prepared: 07/22/20 13:31		Analyzed: 07/23/20 12:53							
QC Source Sample: DP-16W-DUP (A0G0466-44RE1)												
Zinc	54.8	2.00	4.00	ug/L	1	55.6	ND	99	75-125%	---	---	Q-16

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070555 - Total Solids (Dry Weight)							Soil					
Duplicate (0070555-DUP1)			Prepared: 07/20/20 09:18 Analyzed: 07/21/20 08:51									
QC Source Sample: Non-SDG (A0G0256-12)												
% Solids	98.8	1.00	1.00	%	1	---	99.2	---	---	0.4	10%	
Duplicate (0070555-DUP2)			Prepared: 07/20/20 19:05 Analyzed: 07/21/20 08:51									
QC Source Sample: Non-SDG (A0G0490-07)												
% Solids	97.6	1.00	1.00	%	1	---	97.3	---	---	0.3	10%	
Duplicate (0070555-DUP3)			Prepared: 07/20/20 19:05 Analyzed: 07/21/20 08:51									
QC Source Sample: Non-SDG (A0G0513-06)												
% Solids	83.8	1.00	1.00	%	1	---	83.6	---	---	0.1	10%	
Duplicate (0070555-DUP4)			Prepared: 07/20/20 19:05 Analyzed: 07/21/20 08:51									
QC Source Sample: Non-SDG (A0G0513-16)												
% Solids	83.4	1.00	1.00	%	1	---	83.2	---	---	0.2	10%	
Duplicate (0070555-DUP5)			Prepared: 07/20/20 19:05 Analyzed: 07/21/20 08:51									
QC Source Sample: Non-SDG (A0G0523-02)												
% Solids	75.7	1.00	1.00	%	1	---	75.9	---	---	0.2	10%	

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

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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 0070604 - Total Solids (Dry Weight)							Soil					
Duplicate (0070604-DUP1)			Prepared: 07/21/20 08:57 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: DP-14(1.5-2.5) (A0G0466-02)</u>												
<u>EPA 8000D</u>												
% Solids	84.6	1.00	1.00	%	1	---	88.2	---	---	4	10%	
Duplicate (0070604-DUP2)			Prepared: 07/21/20 08:57 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0474-02)</u>												
% Solids	86.3	1.00	1.00	%	1	---	86.2	---	---	0.2	10%	
Duplicate (0070604-DUP3)			Prepared: 07/21/20 08:57 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0490-03)</u>												
% Solids	93.0	1.00	1.00	%	1	---	92.9	---	---	0.1	10%	
Duplicate (0070604-DUP4)			Prepared: 07/21/20 08:57 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0490-15)</u>												
% Solids	97.9	1.00	1.00	%	1	---	97.4	---	---	0.5	10%	
Duplicate (0070604-DUP5)			Prepared: 07/21/20 18:22 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0552-02)</u>												
% Solids	77.7	1.00	1.00	%	1	---	77.6	---	---	0.2	10%	
Duplicate (0070604-DUP6)			Prepared: 07/21/20 18:22 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0561-02)</u>												
% Solids	77.2	1.00	1.00	%	1	---	77.6	---	---	0.5	10%	
Duplicate (0070604-DUP7)			Prepared: 07/21/20 18:32 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0564-04)</u>												
% Solids	76.0	1.00	1.00	%	1	---	76.1	---	---	0.1	10%	
Duplicate (0070604-DUP8)			Prepared: 07/21/20 18:41 Analyzed: 07/22/20 09:16									
<u>QC Source Sample: Non-SDG (A0G0567-02)</u>												
% Solids	80.7	1.00	1.00	%	1	---	81.1	---	---	0.5	10%	

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 0070604 - Total Solids (Dry Weight)							Soil					
Duplicate (0070604-DUP9)												
					Prepared: 07/21/20 19:03		Analyzed: 07/22/20 09:16					
QC Source Sample: Non-SDG (A0G0568-02)												
% Solids	75.1	1.00	1.00	%	1	---	74.5	---	---	0.8	10%	

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

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx****Prep: EPA 3510C (Fuels/Acid Ext.)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070652							
A0G0466-41	Water	NWTPH-Dx	07/16/20 10:20	07/22/20 11:02	1040mL/5mL	1000mL/5mL	0.96
A0G0466-42	Water	NWTPH-Dx	07/16/20 15:15	07/22/20 13:44	1040mL/5mL	1000mL/5mL	0.96
A0G0466-43	Water	NWTPH-Dx	07/16/20 13:20	07/22/20 13:44	1040mL/5mL	1000mL/5mL	0.96
A0G0466-44	Water	NWTPH-Dx	07/16/20 13:40	07/22/20 13:44	1020mL/5mL	1000mL/5mL	0.98
A0G0466-45	Water	NWTPH-Dx	07/16/20 17:55	07/22/20 13:44	1040mL/5mL	1000mL/5mL	0.96
A0G0466-46	Water	NWTPH-Dx	07/16/20 18:35	07/22/20 13:44	1040mL/5mL	1000mL/5mL	0.96
A0G0466-47	Water	NWTPH-Dx	07/16/20 19:00	07/22/20 13:44	1040mL/5mL	1000mL/5mL	0.96

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070663							
A0G0466-01	Soil	NWTPH-Dx	07/16/20 07:30	07/22/20 12:44	10.69g/5mL	10g/5mL	0.94
A0G0466-02	Soil	NWTPH-Dx	07/16/20 07:35	07/22/20 12:44	10.54g/5mL	10g/5mL	0.95
A0G0466-07	Soil	NWTPH-Dx	07/16/20 09:15	07/22/20 12:44	10.1g/5mL	10g/5mL	0.99
A0G0466-08	Soil	NWTPH-Dx	07/16/20 09:20	07/22/20 12:44	10.59g/5mL	10g/5mL	0.94
A0G0466-13	Soil	NWTPH-Dx	07/16/20 11:35	07/22/20 12:44	10.54g/5mL	10g/5mL	0.95
A0G0466-18	Soil	NWTPH-Dx	07/16/20 12:50	07/22/20 12:44	10.19g/5mL	10g/5mL	0.98
A0G0466-19	Soil	NWTPH-Dx	07/16/20 12:55	07/22/20 12:44	10.3g/5mL	10g/5mL	0.97
A0G0466-24	Soil	NWTPH-Dx	07/16/20 16:10	07/22/20 12:44	10.39g/5mL	10g/5mL	0.96
A0G0466-30	Soil	NWTPH-Dx	07/16/20 17:00	07/22/20 12:44	10.43g/5mL	10g/5mL	0.96

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**Prep: EPA 5030B**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070681							
A0G0466-41	Water	NWTPH-Gx (MS)	07/16/20 10:20	07/22/20 20:43	5mL/5mL	5mL/5mL	1.00
A0G0466-42	Water	NWTPH-Gx (MS)	07/16/20 15:15	07/22/20 20:43	5mL/5mL	5mL/5mL	1.00
A0G0466-43	Water	NWTPH-Gx (MS)	07/16/20 13:20	07/22/20 20:43	5mL/5mL	5mL/5mL	1.00
Batch: 0070692							
A0G0466-44	Water	NWTPH-Gx (MS)	07/16/20 13:40	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-45	Water	NWTPH-Gx (MS)	07/16/20 17:55	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-46	Water	NWTPH-Gx (MS)	07/16/20 18:35	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-47	Water	NWTPH-Gx (MS)	07/16/20 19:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00

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ORELAP ID: OR100062

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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
Batch: 0070556							
A0G0466-01	Soil	NWTPH-Gx (MS)	07/16/20 07:30	07/16/20 07:30	5.48g/5mL	5g/5mL	0.91
A0G0466-02	Soil	NWTPH-Gx (MS)	07/16/20 07:35	07/16/20 07:35	5.46g/5mL	5g/5mL	0.92
A0G0466-07	Soil	NWTPH-Gx (MS)	07/16/20 09:15	07/16/20 09:15	5.48g/5mL	5g/5mL	0.91
A0G0466-08	Soil	NWTPH-Gx (MS)	07/16/20 09:20	07/16/20 09:20	5.78g/5mL	5g/5mL	0.87
Batch: 0070574							
A0G0466-13	Soil	NWTPH-Gx (MS)	07/16/20 11:35	07/16/20 11:35	4.83g/5mL	5g/5mL	1.04
A0G0466-18	Soil	NWTPH-Gx (MS)	07/16/20 12:50	07/16/20 12:50	5.62g/5mL	5g/5mL	0.89
A0G0466-19	Soil	NWTPH-Gx (MS)	07/16/20 12:55	07/16/20 12:55	6.22g/5mL	5g/5mL	0.80
A0G0466-24	Soil	NWTPH-Gx (MS)	07/16/20 16:10	07/16/20 16:10	6.1g/5mL	5g/5mL	0.82
Batch: 0070607							
A0G0466-30	Soil	NWTPH-Gx (MS)	07/16/20 17:00	07/16/20 17:00	5.57g/5mL	5g/5mL	0.90

Volatile Organic Compounds by EPA 8260D**Prep: EPA 5030B**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070681							
A0G0466-41	Water	EPA 8260D	07/16/20 10:20	07/22/20 20:43	5mL/5mL	5mL/5mL	1.00
A0G0466-42	Water	EPA 8260D	07/16/20 15:15	07/22/20 20:43	5mL/5mL	5mL/5mL	1.00
A0G0466-43	Water	EPA 8260D	07/16/20 13:20	07/22/20 20:43	5mL/5mL	5mL/5mL	1.00
Batch: 0070692							
A0G0466-35	Water	EPA 8260D	07/16/20 00:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-36	Water	EPA 8260D	07/16/20 00:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-37	Water	EPA 8260D	07/16/20 00:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-38	Water	EPA 8260D	07/16/20 00:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-39	Water	EPA 8260D	07/16/20 00:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-40	Water	EPA 8260D	07/16/20 00:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-44	Water	EPA 8260D	07/16/20 13:40	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-45	Water	EPA 8260D	07/16/20 17:55	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-46	Water	EPA 8260D	07/16/20 18:35	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00
A0G0466-47	Water	EPA 8260D	07/16/20 19:00	07/23/20 10:53	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070556							

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****SAMPLE PREPARATION INFORMATION****Volatile Organic Compounds by EPA 8260D****Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A0G0466-01	Soil	5035A/8260D	07/16/20 07:30	07/16/20 07:30	5.48g/5mL	5g/5mL	0.91
A0G0466-02	Soil	5035A/8260D	07/16/20 07:35	07/16/20 07:35	5.46g/5mL	5g/5mL	0.92
A0G0466-07	Soil	5035A/8260D	07/16/20 09:15	07/16/20 09:15	5.48g/5mL	5g/5mL	0.91
A0G0466-08	Soil	5035A/8260D	07/16/20 09:20	07/16/20 09:20	5.78g/5mL	5g/5mL	0.87
Batch: 0070574							
A0G0466-13	Soil	5035A/8260D	07/16/20 11:35	07/16/20 11:35	4.83g/5mL	5g/5mL	1.04
A0G0466-18	Soil	5035A/8260D	07/16/20 12:50	07/16/20 12:50	5.62g/5mL	5g/5mL	0.89
A0G0466-19	Soil	5035A/8260D	07/16/20 12:55	07/16/20 12:55	6.22g/5mL	5g/5mL	0.80
A0G0466-24	Soil	5035A/8260D	07/16/20 16:10	07/16/20 16:10	6.1g/5mL	5g/5mL	0.82
Batch: 0070607							
A0G0466-30	Soil	5035A/8260D	07/16/20 17:00	07/16/20 17:00	5.57g/5mL	5g/5mL	0.90

Volatile Organic Compounds by EPA 8260D SIM**Prep: EPA 5030B**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070726							
A0G0466-41	Water	EPA 8260D SIM	07/16/20 10:20	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00
A0G0466-42	Water	EPA 8260D SIM	07/16/20 15:15	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00
A0G0466-43	Water	EPA 8260D SIM	07/16/20 13:20	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00
A0G0466-44	Water	EPA 8260D SIM	07/16/20 13:40	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00
A0G0466-45	Water	EPA 8260D SIM	07/16/20 17:55	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00
A0G0466-46	Water	EPA 8260D SIM	07/16/20 18:35	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00
A0G0466-47	Water	EPA 8260D SIM	07/16/20 19:00	07/24/20 12:29	5mL/5mL	5mL/5mL	1.00

Polychlorinated Biphenyls by EPA 8082A**Prep: EPA 3510C (Neutral pH)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0080022							
A0G0466-41	Water	EPA 8082A	07/16/20 10:20	08/03/20 11:00	1030mL/2mL	1000mL/2mL	0.97
A0G0466-42	Water	EPA 8082A	07/16/20 15:15	08/03/20 11:00	1030mL/2mL	1000mL/2mL	0.97
A0G0466-45	Water	EPA 8082A	07/16/20 17:55	08/03/20 11:00	1040mL/2mL	1000mL/2mL	0.96

Prep: EPA 3546

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

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****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: 0070563							
A0G0466-01RE1	Soil	EPA 8082A	07/16/20 07:30	07/20/20 10:43	10.67g/2mL	10g/2mL	0.94
A0G0466-02RE1	Soil	EPA 8082A	07/16/20 07:35	07/20/20 10:43	10.54g/2mL	10g/2mL	0.95
A0G0466-07RE1	Soil	EPA 8082A	07/16/20 09:15	07/20/20 10:43	10.88g/2mL	10g/2mL	0.92
A0G0466-08RE1	Soil	EPA 8082A	07/16/20 09:20	07/20/20 10:43	10.32g/2mL	10g/2mL	0.97
A0G0466-13RE1	Soil	EPA 8082A	07/16/20 11:35	07/20/20 10:43	10.35g/2mL	10g/2mL	0.97
A0G0466-18RE1	Soil	EPA 8082A	07/16/20 12:50	07/20/20 10:43	10.51g/2mL	10g/2mL	0.95
A0G0466-19RE1	Soil	EPA 8082A	07/16/20 12:55	07/20/20 10:43	10.32g/2mL	10g/2mL	0.97
A0G0466-24RE1	Soil	EPA 8082A	07/16/20 16:10	07/20/20 16:20	10.27g/2mL	10g/2mL	0.97
A0G0466-30RE1	Soil	EPA 8082A	07/16/20 17:00	07/20/20 10:43	10.44g/2mL	10g/2mL	0.96

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070592							
A0G0466-01	Soil	EPA 8270E SIM	07/16/20 07:30	07/21/20 07:02	10.08g/5mL	10g/5mL	0.99
A0G0466-02	Soil	EPA 8270E SIM	07/16/20 07:35	07/21/20 07:02	10.18g/5mL	10g/5mL	0.98
A0G0466-07	Soil	EPA 8270E SIM	07/16/20 09:15	07/21/20 07:02	10.38g/5mL	10g/5mL	0.96
A0G0466-08	Soil	EPA 8270E SIM	07/16/20 09:20	07/21/20 07:02	10.76g/5mL	10g/5mL	0.93
A0G0466-13	Soil	EPA 8270E SIM	07/16/20 11:35	07/21/20 07:02	10.31g/5mL	10g/5mL	0.97
A0G0466-18	Soil	EPA 8270E SIM	07/16/20 12:50	07/21/20 07:02	10.11g/5mL	10g/5mL	0.99
A0G0466-19RE1	Soil	EPA 8270E SIM	07/16/20 12:55	07/21/20 07:02	10.02g/5mL	10g/5mL	1.00
A0G0466-24	Soil	EPA 8270E SIM	07/16/20 16:10	07/21/20 07:02	10.32g/5mL	10g/5mL	0.97
A0G0466-30	Soil	EPA 8270E SIM	07/16/20 17:00	07/21/20 07:02	10.34g/5mL	10g/5mL	0.97

Semivolatile Organic Compounds by EPA 8270E**Prep: EPA 3510C (Acid/Base Neutral)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070683							
A0G0466-41RE2	Water	EPA 8270E	07/16/20 10:20	07/23/20 07:12	1070mL/1mL	1000mL/1mL	0.94
A0G0466-42RE1	Water	EPA 8270E	07/16/20 15:15	07/23/20 07:12	1060mL/1mL	1000mL/1mL	0.94
A0G0466-43RE1	Water	EPA 8270E	07/16/20 13:20	07/23/20 07:12	1050mL/1mL	1000mL/1mL	0.95
A0G0466-44RE1	Water	EPA 8270E	07/16/20 13:40	07/23/20 07:12	1040mL/1mL	1000mL/1mL	0.96
A0G0466-45RE1	Water	EPA 8270E	07/16/20 17:55	07/23/20 07:12	1060mL/1mL	1000mL/1mL	0.94
A0G0466-46RE1	Water	EPA 8270E	07/16/20 18:35	07/23/20 07:12	1060mL/1mL	1000mL/1mL	0.94

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Project: **Former Automatic Vending Co.**Project Number: **BCSAmerica-1-01-03**Project Manager: **Kyle Haggart****Report ID:****A0G0466 - 08 18 20 1602****SAMPLE PREPARATION INFORMATION****Semivolatile Organic Compounds by EPA 8270E****Prep: EPA 3510C (Acid/Base Neutral)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A0G0466-47RE2	Water	EPA 8270E	07/16/20 19:00	07/23/20 07:12	1060mL/1mL	1000mL/1mL	0.94

Total Metals by EPA 6020A (ICPMS)**Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070702							
A0G0466-41	Water	EPA 6020A	07/16/20 10:20	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-41RE1	Water	EPA 6020A	07/16/20 10:20	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-42	Water	EPA 6020A	07/16/20 15:15	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-42RE1	Water	EPA 6020A	07/16/20 15:15	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-43	Water	EPA 6020A	07/16/20 13:20	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-44	Water	EPA 6020A	07/16/20 13:40	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-45	Water	EPA 6020A	07/16/20 17:55	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-45	Water	EPA 6020A	07/16/20 17:55	07/23/20 13:03	45mL/50mL	45mL/50mL	1.00
A0G0466-46	Water	EPA 6020A	07/16/20 18:35	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-46RE1	Water	EPA 6020A	07/16/20 18:35	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00
A0G0466-47	Water	EPA 6020A	07/16/20 19:00	07/23/20 11:35	45mL/50mL	45mL/50mL	1.00

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070667							
A0G0466-01	Soil	EPA 6020A	07/16/20 07:30	07/22/20 13:40	0.461g/50mL	0.5g/50mL	1.08
A0G0466-01RE1	Soil	EPA 6020A	07/16/20 07:30	07/22/20 13:40	0.461g/50mL	0.5g/50mL	1.08
A0G0466-02	Soil	EPA 6020A	07/16/20 07:35	07/22/20 13:40	0.482g/50mL	0.5g/50mL	1.04
A0G0466-07	Soil	EPA 6020A	07/16/20 09:15	07/22/20 13:40	0.489g/50mL	0.5g/50mL	1.02
A0G0466-07RE1	Soil	EPA 6020A	07/16/20 09:15	07/22/20 13:40	0.489g/50mL	0.5g/50mL	1.02
A0G0466-08	Soil	EPA 6020A	07/16/20 09:20	07/22/20 13:40	0.497g/50mL	0.5g/50mL	1.01
A0G0466-08RE1	Soil	EPA 6020A	07/16/20 09:20	07/22/20 13:40	0.497g/50mL	0.5g/50mL	1.01
A0G0466-13	Soil	EPA 6020A	07/16/20 11:35	07/22/20 13:40	0.509g/50mL	0.5g/50mL	0.98
A0G0466-18	Soil	EPA 6020A	07/16/20 12:50	07/22/20 13:40	0.488g/50mL	0.5g/50mL	1.02
A0G0466-19	Soil	EPA 6020A	07/16/20 12:55	07/22/20 13:40	0.498g/50mL	0.5g/50mL	1.00
A0G0466-24	Soil	EPA 6020A	07/16/20 16:10	07/22/20 13:40	0.475g/50mL	0.5g/50mL	1.05
A0G0466-30	Soil	EPA 6020A	07/16/20 17:00	07/22/20 13:40	0.506g/50mL	0.5g/50mL	0.99

Dissolved Metals by EPA 6020A (ICPMS)

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Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

SAMPLE PREPARATION INFORMATION**Dissolved Metals by EPA 6020A (ICPMS)****Prep: Matrix Matched Direct Inject**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0070665							
A0G0466-41	Water	EPA 6020A (Diss)	07/16/20 10:20	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-42	Water	EPA 6020A (Diss)	07/16/20 15:15	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-43	Water	EPA 6020A (Diss)	07/16/20 13:20	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-44	Water	EPA 6020A (Diss)	07/16/20 13:40	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-44RE1	Water	EPA 6020A (Diss)	07/16/20 13:40	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-45	Water	EPA 6020A (Diss)	07/16/20 17:55	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-46	Water	EPA 6020A (Diss)	07/16/20 18:35	07/22/20 13:31	45mL/50mL	45mL/50mL	1.00
A0G0466-47	Water	EPA 6020A (Diss)	07/16/20 19:00	07/22/20 13:31	45mL/50mL	45mL/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: 0070555							
A0G0466-01	Soil	EPA 8000D	07/16/20 07:30	07/20/20 09:18			NA
Batch: 0070604							
A0G0466-02	Soil	EPA 8000D	07/16/20 07:35	07/21/20 08:57			NA
A0G0466-07	Soil	EPA 8000D	07/16/20 09:15	07/21/20 08:57			NA
A0G0466-08	Soil	EPA 8000D	07/16/20 09:20	07/21/20 08:57			NA
A0G0466-13	Soil	EPA 8000D	07/16/20 11:35	07/21/20 08:57			NA
A0G0466-18	Soil	EPA 8000D	07/16/20 12:50	07/21/20 08:57			NA
A0G0466-19	Soil	EPA 8000D	07/16/20 12:55	07/21/20 08:57			NA
A0G0466-24	Soil	EPA 8000D	07/16/20 16:10	07/21/20 08:57			NA
A0G0466-30	Soil	EPA 8000D	07/16/20 17:00	07/21/20 08:57			NA

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

QUALIFIER DEFINITIONS

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

Apex Laboratories

- 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-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.
- 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.
- F-13** The chromatographic pattern does not resemble the fuel standard used for quantitation
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- P-10** Result estimated due to the presence of multiple PCB Aroclors and/or matrix interference.
- 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-16** Reanalysis of an original Batch QC sample.
- Q-17** RPD between original and duplicate sample is outside of established control limits.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-24** The RPD for this spike and spike duplicate is above established control limits. Recoveries for both the spike and spike duplicate are within control limits.
- Q-29** Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- Q-39** Results for sample duplicate are significantly higher than the sample results. See duplicate results in QC section of the report.
- 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 erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +10%. 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 +12%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +16%. The results are reported as Estimated Values.

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Report ID:

A0G0466 - 08 18 20 1602

- Q-54c** 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-54d** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +23%. 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 +28%. 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 +3%. 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 +31%. 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 +5%. 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 +6%. 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 +9%. 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-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.
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- 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.

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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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A0G0466 - 08 18 20 1602

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

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Project: **Former Automatic Vending Co.**

Project Number: **BCSAmerica-1-01-03**

Project Manager: **Kyle Haggart**

Report ID:

A0G0466 - 08 18 20 1602

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 provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

APEX LABS 6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323		CHAIN OF CUSTODY		Lab # <u>A0G0466</u> COC <u>3 of 5</u>	
Company: <u>GeoDesign</u>		Project Mgr: <u>Kyle Haggart</u>		Project Name: <u>Former Automatic Vending</u>	
Address: <u>9450 SW Commerce Cir</u>		Phone: <u>503 985 5787</u>		Email: _____	
Sampled by: <u>Tim Heintz</u>		Project #/PO #		Project #/PO # <u>BCSAmerica-1-01-03</u>	
Site Location: <u>WA CA</u> <u>AK ID</u>		ANALYSIS REQUEST			
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS
DP-17 (12-13)		7/17/10	1310	S	3
DP-17 (16-17)			1325		3
DP-17 (24-28)			1355		3
DP-18 (2-3)			1610		3
DP-18 (6-7)			1615		6
DP-18 (10-11)			1620		3
DP-18 (15-16)			1625		3
DP-18 (23-24)			1630		3
DP-18 (25-26)			1635		6
DP-19 (05-15)			1700		3
SPECIAL INSTRUCTIONS: <u>Low-level detect limits as discussed</u> <u>Sample labels BCS - 1-01-03 also</u>					
Normal Turn Around Time (TAT) = 10 Business Days					
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: _____					
RELINQUISHED BY: Signature: <u>Tim Heintz</u> Printed Name: <u>Tim Heintz</u> Company: <u>GeoDesign</u>		RECEIVED BY: Signature: <u>[Signature]</u> Printed Name: <u>Ambercup</u> Company: <u>Apex Labs</u>		RECEIVED BY: Signature: _____ Printed Name: _____ Company: _____	
Date: <u>7/17/10</u> Time: <u>1315</u>		Date: <u>7/19/10</u> Time: <u>1315</u>		Date: _____ Time: _____	

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Report ID:

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COC/Container Discrepancies	
COC Reads	Container Reads/Comments
DP-16(3-4)	NO T/D on jar
DP-16(25-26)	no D on jars, T reads 12:10
+ + ~~DP-17(5-6)~~	1/4 was no sample ID matched by T
DP-17(12-13)	1/2 voas no sample ID matched by T
DP-17(16-17)	1/2 voas no D on cont
DP-18(25-26)	1/4 voas reads T o 16:15
DP-18(6-7)	4/4 voas reads DP-18(5-6) matched by T
DP-19(22.5-23.5)	2/4 voas reads DP-19 + no + on cont
DP-15W	matched by process of elimination
DP-17W	1/4 HCL ambers read + of 15:00
~~DP-18 to T44 7-17-20~~	2/2 nitric, 2/4 HCL ambers, 2/2 unreserved ambers
DP-18W	read D of 6:17
DP-19W	2/2 of nitric polys read D of 7:10
DP-15(18-19) w/ D of 7:16 and T of 9:40	1/4 HCL ambers no sample ID
DP-16(20-21)	bagged together
DP-14W to DP-19W	received not listed on COC
	Listed Did not receive samples
	COC list 20 conts received 14

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Project: Former Automatic Vending Co.

Project Number: BCSAmerica-1-01-03

Project Manager: Kyle Haggart

Report ID:

A0G0466 - 08 18 20 1602

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A0 G0466

Project/Project #: Former Automatic Vending Co. #BCSAmerica-1-01-03

Delivery Info:

Date/time received: 7/17/20 @ 1315 By: AKK

Delivered by: Apex Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Date/time inspected: 7/17/20 @ 1320 By: AKK

Chain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒

Signed/dated by client? Yes ☒ No ☐

Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.6</u>	<u>1.3</u>	<u>5.5</u>	<u>3.3</u>	<u>5.9</u>	<u>6.3</u>	

Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	

Temp. blanks? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	

Ice type: (Gel/Real/Other) Real Real Real Real Real Real Real

Condition: Melty Melty Melty Melty Melty Melty Melty

Cooler out of temp? ☒ (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 7/17/20

Out of temperature samples form initiated? ☒ Yes ☒ No ☒ NA 7/17/20

Samples Inspection: Date/time inspected: 7-17-20 @ 15:25 By: TAM

All samples intact? Yes ☒ No ☐ Comments: _____

Bottle labels/COCs agree? Yes ☐ No ☒ Comments: see form

COC/container discrepancies form initiated? Yes ☒ No ☐

Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: _____

Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments: _____

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐

Comments: _____

Additional information: _____

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

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Philip Nerenberg

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Apex Laboratories, LLC

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

Thursday, August 29, 2019

Kyle Haggart
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A9G0676 - BCSAmerica-1-01-02 - [none]

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 A9G0676, which was received by the laboratory on 7/19/2019 at 3:03:00PM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.0 degC	Cooler #2	4.9 degC
Cooler #3	2.2 degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-1(5-6.5)	A9G0676-01	Soil	07/18/19 10:25	07/19/19 15:03
DP-1(11-12.5)	A9G0676-02	Soil	07/18/19 10:32	07/19/19 15:03
DP-1(15-16.5)	A9G0676-03	Soil	07/18/19 10:40	07/19/19 15:03
DP-1(21-22.5)	A9G0676-04	Soil	07/18/19 10:50	07/19/19 15:03
DP-1(27.5-29)	A9G0676-05	Soil	07/18/19 11:00	07/19/19 15:03
DP-2(11-12.5)	A9G0676-06	Soil	07/18/19 11:15	07/19/19 15:03
DP-2(16.5-18)	A9G0676-07	Soil	07/18/19 11:20	07/19/19 15:03
DP-2(21-22.5)	A9G0676-08	Soil	07/18/19 11:35	07/19/19 15:03
DP-2(25-26.5)	A9G0676-09	Soil	07/18/19 11:40	07/19/19 15:03
DP-3(10-11.5)	A9G0676-10	Soil	07/18/19 12:00	07/19/19 15:03
DP-3(22-23.5)	A9G0676-11	Soil	07/18/19 12:18	07/19/19 15:03
DP-4(6.5-8)	A9G0676-12	Soil	07/19/19 08:20	07/19/19 15:03
DP-4(11.5-13)	A9G0676-13	Soil	07/19/19 08:25	07/19/19 15:03
DP-4(16.5-18)	A9G0676-14	Soil	07/19/19 08:30	07/19/19 15:03
DP-5(6-7.5)	A9G0676-15	Soil	07/19/19 08:47	07/19/19 15:03
DP-5(10-11.5)	A9G0676-16	Soil	07/19/19 08:55	07/19/19 15:03
DP-5(15-16.5)	A9G0676-17	Soil	07/19/19 09:00	07/19/19 15:03
DP-6(2-3.5)	A9G0676-18	Soil	07/19/19 09:10	07/19/19 15:03
DP-6(6.5-8)	A9G0676-19	Soil	07/19/19 09:15	07/19/19 15:03
DP-6(12-13.5)	A9G0676-20	Soil	07/19/19 09:20	07/19/19 15:03
DP-6(17-18.5)	A9G0676-21	Soil	07/19/19 09:25	07/19/19 15:03
DP-7(1-2.5)	A9G0676-22	Soil	07/19/19 09:30	07/19/19 15:03
DP-7(6.5-8)	A9G0676-23	Soil	07/19/19 09:35	07/19/19 15:03
DP-7(11.5-13)	A9G0676-24	Soil	07/19/19 09:40	07/19/19 15:03
DP-7(16.5-18)	A9G0676-25	Soil	07/19/19 09:45	07/19/19 15:03
DP-8(1.5-3)	A9G0676-26	Soil	07/19/19 09:50	07/19/19 15:03
DP-8(6.5-8)	A9G0676-27	Soil	07/19/19 09:55	07/19/19 15:03
DP-8(11.5-13)	A9G0676-28	Soil	07/19/19 09:58	07/19/19 15:03
DP-8(17-18.5)	A9G0676-29	Soil	07/19/19 10:00	07/19/19 15:03
DP-9(1-2.5)	A9G0676-30	Soil	07/19/19 10:10	07/19/19 15:03
DP-9(6.5-8)	A9G0676-31	Soil	07/19/19 10:15	07/19/19 15:03
DP-9(11-12.5)	A9G0676-32	Soil	07/19/19 10:20	07/19/19 15:03
DP-9(16.5-18)	A9G0676-33	Soil	07/19/19 10:25	07/19/19 15:03

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-10(1.5-3)	A9G0676-34	Soil	07/19/19 10:30	07/19/19 15:03
DP-10(6-7.5)	A9G0676-35	Soil	07/19/19 10:35	07/19/19 15:03
DP-10(11.5-13)	A9G0676-36	Soil	07/19/19 10:40	07/19/19 15:03
DP-10(16.5-18)	A9G0676-37	Soil	07/19/19 10:45	07/19/19 15:03
DP-11(6-7.5)	A9G0676-38	Soil	07/19/19 10:50	07/19/19 15:03
DP-11(10-11.5)	A9G0676-39	Soil	07/19/19 10:55	07/19/19 15:03
DP-11(16.5-18)	A9G0676-40	Soil	07/19/19 11:00	07/19/19 15:03
DP-12(0.5-2)	A9G0676-41	Soil	07/19/19 11:10	07/19/19 15:03
DP-12(5-6.5)	A9G0676-42	Soil	07/19/19 11:15	07/19/19 15:03
DP-12(10-11.5)	A9G0676-43	Soil	07/19/19 11:20	07/19/19 15:03
DP-12(16.5-18)	A9G0676-44	Soil	07/19/19 11:25	07/19/19 15:03
DP-13(1.5-3)	A9G0676-45	Soil	07/19/19 11:30	07/19/19 15:03
DP-13(5-6.5)	A9G0676-46	Soil	07/19/19 11:35	07/19/19 15:03
DP-13(10-11.5)	A9G0676-47	Soil	07/19/19 11:40	07/19/19 15:03

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071293		
Diesel	ND	11.1	25.0	mg/kg dry	1	07/25/19 23:44	NWTPH-Dx	
Oil	ND	22.2	50.0	mg/kg dry	1	07/25/19 23:44	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %	1	07/25/19 23:44	NWTPH-Dx	
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.64	25.0	mg/kg dry	1	07/26/19 00:06	NWTPH-Dx	
Oil	ND	19.3	50.0	mg/kg dry	1	07/26/19 00:06	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %	1	07/26/19 00:06	NWTPH-Dx	
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.81	25.0	mg/kg dry	1	07/26/19 00:27	NWTPH-Dx	
Oil	261	19.6	50.0	mg/kg dry	1	07/26/19 00:27	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/26/19 00:27	NWTPH-Dx	
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080541		
Diesel	ND	11.6	25.0	mg/kg dry	1	08/01/19 21:16	NWTPH-Dx	
Oil	ND	23.3	50.0	mg/kg dry	1	08/01/19 21:16	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %	1	08/01/19 21:16	NWTPH-Dx	
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.77	25.0	mg/kg dry	1	07/26/19 00:49	NWTPH-Dx	
Oil	ND	19.5	50.0	mg/kg dry	1	07/26/19 00:49	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %	1	07/26/19 00:49	NWTPH-Dx	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.90	25.0	mg/kg dry	1	07/26/19 01:10	NWTPH-Dx	
Oil	ND	19.8	50.0	mg/kg dry	1	07/26/19 01:10	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %	1	07/26/19 01:10	NWTPH-Dx	
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.6	25.0	mg/kg dry	1	07/26/19 01:32	NWTPH-Dx	
Oil	ND	21.3	50.0	mg/kg dry	1	07/26/19 01:32	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/26/19 01:32	NWTPH-Dx	

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GeoDesign, Inc.

9450 SW Commerce Circle
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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.72	25.0	mg/kg dry	1	07/26/19 01:54	NWTPH-Dx	
Oil	ND	19.4	50.0	mg/kg dry	1	07/26/19 01:54	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %	1	07/26/19 01:54	NWTPH-Dx	
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.4	25.0	mg/kg dry	1	07/26/19 02:15	NWTPH-Dx	
Oil	ND	20.7	50.0	mg/kg dry	1	07/26/19 02:15	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %	1	07/26/19 02:15	NWTPH-Dx	
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.1	25.0	mg/kg dry	1	07/26/19 08:08	NWTPH-Dx	
Oil	ND	20.1	50.0	mg/kg dry	1	07/26/19 08:08	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 106 %		Limits: 50-150 %	1	07/26/19 08:08	NWTPH-Dx	
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.6	25.0	mg/kg dry	1	07/26/19 08:28	NWTPH-Dx	
Oil	ND	21.3	50.0	mg/kg dry	1	07/26/19 08:28	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 107 %		Limits: 50-150 %	1	07/26/19 08:28	NWTPH-Dx	
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.3	25.0	mg/kg dry	1	07/26/19 09:29	NWTPH-Dx	
Oil	ND	20.5	50.0	mg/kg dry	1	07/26/19 09:29	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %	1	07/26/19 09:29	NWTPH-Dx	
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071293		
Diesel	ND	218	436	mg/kg dry	20	07/26/19 07:28	NWTPH-Dx	
Oil	972	436	871	mg/kg dry	20	07/26/19 07:28	NWTPH-Dx	F-03
Surrogate: o-Terphenyl (Surr)		Recovery: %		Limits: 50-150 %	20	07/26/19 07:28	NWTPH-Dx	S-01
DP-11(10-11.5) (A9G0676-39)				Matrix: Soil		Batch: 9080541		
Diesel	ND	10.6	25.0	mg/kg dry	1	08/01/19 22:01	NWTPH-Dx	
Oil	ND	21.2	50.0	mg/kg dry	1	08/01/19 22:01	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 108 %		Limits: 50-150 %	1	08/01/19 22:01	NWTPH-Dx	

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9450 SW Commerce Circle
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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071293		
Diesel	ND	213	426	mg/kg dry	20	07/26/19 08:08	NWTPH-Dx	
Oil	1360	426	852	mg/kg dry	20	07/26/19 08:08	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: %</i>	<i>Limits: 50-150 %</i>	<i>20</i>	<i>07/26/19 08:08</i>	<i>NWTPH-Dx</i>	<i>S-01</i>	
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil		Batch: 9080541		
Diesel	ND	10.0	25.0	mg/kg dry	1	08/01/19 22:23	NWTPH-Dx	
Oil	ND	20.1	50.0	mg/kg dry	1	08/01/19 22:23	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 103 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>08/01/19 22:23</i>	<i>NWTPH-Dx</i>		
DP-13(5-6.5) (A9G0676-46RE1)				Matrix: Soil		Batch: 9071293		
Diesel	ND	315	630	mg/kg dry	25	07/26/19 11:50	NWTPH-Dx	
Oil	1680	630	1260	mg/kg dry	25	07/26/19 11:50	NWTPH-Dx	F-03
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: %</i>	<i>Limits: 50-150 %</i>	<i>25</i>	<i>07/26/19 11:50</i>	<i>NWTPH-Dx</i>	<i>S-01</i>	
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080541		
Diesel	ND	10.3	25.0	mg/kg dry	1	08/01/19 22:44	NWTPH-Dx	
Oil	ND	20.5	50.0	mg/kg dry	1	08/01/19 22:44	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 105 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>08/01/19 22:44</i>	<i>NWTPH-Dx</i>		

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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
DP-1(11-12.5) (A9G0676-02)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	3.04	6.08	mg/kg dry	50	07/24/19 02:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 85 %	Limits: 50-150 %	1	07/24/19 02:17	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		84 %	50-150 %	1	07/24/19 02:17	NWTPH-Gx (MS)		
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	3.10	6.20	mg/kg dry	50	07/24/19 03:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 86 %	Limits: 50-150 %	1	07/24/19 03:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		84 %	50-150 %	1	07/24/19 03:12	NWTPH-Gx (MS)		
DP-2(21-22.5) (A9G0676-08)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.89	5.78	mg/kg dry	50	07/24/19 03:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 88 %	Limits: 50-150 %	1	07/24/19 03:39	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		85 %	50-150 %	1	07/24/19 03:39	NWTPH-Gx (MS)		
DP-3(10-11.5) (A9G0676-10)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.83	5.65	mg/kg dry	50	07/24/19 04:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 85 %	Limits: 50-150 %	1	07/24/19 04:07	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		85 %	50-150 %	1	07/24/19 04:07	NWTPH-Gx (MS)		
DP-4(11.5-13) (A9G0676-13)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.87	5.75	mg/kg dry	50	07/24/19 04:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 89 %	Limits: 50-150 %	1	07/24/19 04:34	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		86 %	50-150 %	1	07/24/19 04:34	NWTPH-Gx (MS)		
DP-5(10-11.5) (A9G0676-16)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	3.12	6.23	mg/kg dry	50	07/24/19 05:01	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 90 %	Limits: 50-150 %	1	07/24/19 05:01	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		86 %	50-150 %	1	07/24/19 05:01	NWTPH-Gx (MS)		
DP-6(12-13.5) (A9G0676-20)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.76	5.53	mg/kg dry	50	07/24/19 05:56	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 92 %	Limits: 50-150 %	1	07/24/19 05:56	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		88 %	50-150 %	1	07/24/19 05:56	NWTPH-Gx (MS)		
DP-7(11.5-13) (A9G0676-24)		Matrix: Soil			Batch: 9071206			

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	ND	2.59	5.18	mg/kg dry	50	07/24/19 06:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 93 %	Limits: 50-150 %	1	07/24/19 06:23	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		89 %	50-150 %	1	07/24/19 06:23	NWTPH-Gx (MS)		
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	ND	3.01	6.02	mg/kg dry	50	07/24/19 07:18	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 94 %	Limits: 50-150 %	1	07/24/19 07:18	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		89 %	50-150 %	1	07/24/19 07:18	NWTPH-Gx (MS)		
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	ND	3.18	6.35	mg/kg dry	50	07/24/19 07:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 94 %	Limits: 50-150 %	1	07/24/19 07:45	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		90 %	50-150 %	1	07/24/19 07:45	NWTPH-Gx (MS)		
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
Gasoline Range Organics	ND	3.24	6.48	mg/kg dry	50	07/24/19 16:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 83 %	Limits: 50-150 %	1	07/24/19 16:13	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		83 %	50-150 %	1	07/24/19 16:13	NWTPH-Gx (MS)		
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Gasoline Range Organics	15.0	3.26	6.52	mg/kg dry	50	07/24/19 17:08	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 88 %	Limits: 50-150 %	1	07/24/19 17:08	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		83 %	50-150 %	1	07/24/19 17:08	NWTPH-Gx (MS)		
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
Gasoline Range Organics	4.42	2.62	5.24	mg/kg dry	50	08/02/19 19:17	NWTPH-Gx (MS)	J
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 108 %	Limits: 50-150 %	1	08/02/19 19:17	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		110 %	50-150 %	1	08/02/19 19:17	NWTPH-Gx (MS)		
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	14.5	2.83	5.65	mg/kg dry	50	07/24/19 08:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 99 %	Limits: 50-150 %	1	07/24/19 08:13	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		91 %	50-150 %	1	07/24/19 08:13	NWTPH-Gx (MS)		
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Gasoline Range Organics	ND	2.99	5.97	mg/kg dry	50	08/02/19 19:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 103 %	Limits: 50-150 %	1	08/02/19 19:45	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		109 %	50-150 %	1	08/02/19 19:45	NWTPH-Gx (MS)		
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	22.0	3.90	7.80	mg/kg dry	50	07/24/19 08:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 101 %	Limits: 50-150 %	1	07/24/19 08:40	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		89 %	50-150 %	1	07/24/19 08:40	NWTPH-Gx (MS)		
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080584		
Gasoline Range Organics	ND	3.38	6.77	mg/kg dry	50	08/02/19 20:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 109 %	Limits: 50-150 %	1	08/02/19 20:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		113 %	50-150 %	1	08/02/19 20:12	NWTPH-Gx (MS)		

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.608	1.22	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Acrylonitrile	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Benzene	ND	0.00608	0.0122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromochloromethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromodichloromethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromoform	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromomethane	ND	0.608	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2-Butanone (MEK)	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
n-Butylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
sec-Butylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
tert-Butylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Carbon disulfide	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Carbon tetrachloride	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chloroethane	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chloroform	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chloromethane	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2-Chlorotoluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
4-Chlorotoluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Dibromochloromethane	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Dibromomethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Dichlorodifluoromethane	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1-Dichloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1-Dichloroethene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071206		
1,2-Dichloropropane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,3-Dichloropropane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2,2-Dichloropropane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1-Dichloropropene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Ethylbenzene	ND	0.0304	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Hexachlorobutadiene	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2-Hexanone	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Isopropylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
4-Isopropyltoluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Methylene chloride	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Naphthalene	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
n-Propylbenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Styrene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Toluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Trichloroethene (TCE)	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Trichlorofluoromethane	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Vinyl chloride	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
m,p-Xylene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
o-Xylene	ND	0.0304	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)		Matrix: Soil			Batch: 9071206			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 105 %	Limits: 80-120 %	1	07/24/19 02:17	5035A/8260C		
Toluene-d8 (Surr)		98 %	80-120 %	1	07/24/19 02:17	5035A/8260C		
4-Bromofluorobenzene (Surr)		99 %	80-120 %	1	07/24/19 02:17	5035A/8260C		
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.620	1.24	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Acrylonitrile	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Benzene	ND	0.00620	0.0124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromochloromethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromodichloromethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromoform	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromomethane	ND	0.620	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2-Butanone (MEK)	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
n-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
sec-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
tert-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Carbon disulfide	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Carbon tetrachloride	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chloroethane	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chloroform	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chloromethane	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
4-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Dibromochloromethane	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Dibromomethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Dichlorodifluoromethane	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1-Dichloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071206		
1,2-Dichloroethane (EDC)	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dichloropropane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,3-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2,2-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Ethylbenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Hexachlorobutadiene	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2-Hexanone	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Isopropylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
4-Isopropyltoluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Methylene chloride	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Naphthalene	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
n-Propylbenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Styrene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Toluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Trichloroethene (TCE)	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Trichlorofluoromethane	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071206		
1,3,5-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Vinyl chloride	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
m,p-Xylene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
o-Xylene	ND	0.0310	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %	1	07/24/19 03:12	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 03:12	5035A/8260C	
4-Bromofluorobenzene (Surr)		101 %		80-120 %	1	07/24/19 03:12	5035A/8260C	
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.578	1.16	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Acrylonitrile	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Benzene	ND	0.00578	0.0116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromochloromethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromodichloromethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromoform	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromomethane	ND	0.578	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2-Butanone (MEK)	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
n-Butylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
sec-Butylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
tert-Butylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Carbon disulfide	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Carbon tetrachloride	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chloroethane	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chloroform	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chloromethane	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2-Chlorotoluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
4-Chlorotoluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Dibromochloromethane	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Dibromomethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071206		
1,3-Dichlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Dichlorodifluoromethane	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1-Dichloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1-Dichloroethene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dichloropropane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,3-Dichloropropane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2,2-Dichloropropane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1-Dichloropropene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Ethylbenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Hexachlorobutadiene	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2-Hexanone	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Isopropylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
4-Isopropyltoluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Methylene chloride	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Naphthalene	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
n-Propylbenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Styrene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Tetrachloroethene (PCE)	0.0150	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	J
Toluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071206		
Trichloroethene (TCE)	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Trichlorofluoromethane	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Vinyl chloride	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
m,p-Xylene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
o-Xylene	ND	0.0289	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 98 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 03:39</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>	<i>80-120 %</i>	<i>1</i>	<i>07/24/19 03:39</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>102 %</i>	<i>80-120 %</i>	<i>1</i>	<i>07/24/19 03:39</i>	<i>5035A/8260C</i>	
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080523		
Acetone	ND	0.749	1.50	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Acrylonitrile	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Benzene	ND	0.00749	0.0150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromochloromethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromodichloromethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromoform	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromomethane	ND	0.749	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2-Butanone (MEK)	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
n-Butylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
sec-Butylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
tert-Butylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Carbon disulfide	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Carbon tetrachloride	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chloroethane	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chloroform	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chloromethane	ND	0.187	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2-Chlorotoluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
4-Chlorotoluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Dibromochloromethane	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080523		
1,2-Dibromo-3-chloropropane	ND	0.187	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Dibromomethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Dichlorodifluoromethane	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1-Dichloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1-Dichloroethene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dichloropropane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,3-Dichloropropane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2,2-Dichloropropane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1-Dichloropropene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Ethylbenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Hexachlorobutadiene	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2-Hexanone	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Isopropylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
4-Isopropyltoluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Methylene chloride	ND	0.374	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Naphthalene	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
n-Propylbenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Styrene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Toluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080523		
1,2,3-Trichlorobenzene	ND	0.187	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.374	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Trichloroethene (TCE)	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Trichlorofluoromethane	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Vinyl chloride	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
m,p-Xylene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
o-Xylene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	115 %	<i>Limits:</i>	80-120 %	1	08/01/19 16:59	5035A/8260C
<i>Toluene-d8 (Surr)</i>			101 %		80-120 %	1	08/01/19 16:59	5035A/8260C
<i>4-Bromofluorobenzene (Surr)</i>			100 %		80-120 %	1	08/01/19 16:59	5035A/8260C
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.565	1.13	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Acrylonitrile	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Benzene	ND	0.00565	0.0113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromochloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromodichloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromoform	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromomethane	ND	0.565	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2-Butanone (MEK)	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
n-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
sec-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
tert-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Carbon disulfide	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Carbon tetrachloride	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Chlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Chloroethane	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Chloroform	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071206		
Chloromethane	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
4-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Dibromochloromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Dibromomethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Dichlorodifluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1-Dichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dichloropropane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,3-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2,2-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Ethylbenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Hexachlorobutadiene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2-Hexanone	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Isopropylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
4-Isopropyltoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Methylene chloride	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Naphthalene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
n-Propylbenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Styrene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071206		
1,1,1,2-Tetrachloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Toluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Trichloroethene (TCE)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Trichlorofluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Vinyl chloride	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
m,p-Xylene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
o-Xylene	ND	0.0283	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %	1	07/24/19 04:07	5035A/8260C	
Toluene-d8 (Surr)		100 %		80-120 %	1	07/24/19 04:07	5035A/8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/24/19 04:07	5035A/8260C	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.575	1.15	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Acrylonitrile	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Benzene	ND	0.00575	0.0115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromochloromethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromodichloromethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromoform	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromomethane	ND	0.575	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2-Butanone (MEK)	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
n-Butylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
sec-Butylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
tert-Butylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Carbon disulfide	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071206		
Carbon tetrachloride	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chloroethane	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chloroform	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chloromethane	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2-Chlorotoluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
4-Chlorotoluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Dibromochloromethane	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Dibromomethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Dichlorodifluoromethane	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1-Dichloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1-Dichloroethene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dichloropropane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,3-Dichloropropane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2,2-Dichloropropane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1-Dichloropropene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Ethylbenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Hexachlorobutadiene	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2-Hexanone	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Isopropylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
4-Isopropyltoluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Methylene chloride	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071206		
Methyl tert-butyl ether (MTBE)	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Naphthalene	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
n-Propylbenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Styrene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Toluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Trichloroethene (TCE)	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Trichlorofluoromethane	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Vinyl chloride	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
m,p-Xylene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
o-Xylene	ND	0.0287	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i> 96 %		<i>Limits:</i> 80-120 %	1	07/24/19 04:34	5035A/8260C	
<i>Toluene-d8 (Surr)</i>		98 %		80-120 %	1	07/24/19 04:34	5035A/8260C	
<i>4-Bromofluorobenzene (Surr)</i>		99 %		80-120 %	1	07/24/19 04:34	5035A/8260C	

DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.623	1.25	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Acrylonitrile	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Benzene	ND	0.00623	0.0125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromochloromethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromodichloromethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromoform	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromomethane	ND	0.623	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2-Butanone (MEK)	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071206		
n-Butylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
sec-Butylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
tert-Butylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Carbon disulfide	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Carbon tetrachloride	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chloroethane	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chloroform	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chloromethane	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2-Chlorotoluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
4-Chlorotoluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Dibromochloromethane	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Dibromomethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Dichlorodifluoromethane	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1-Dichloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1-Dichloroethene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dichloropropane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,3-Dichloropropane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2,2-Dichloropropane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1-Dichloropropene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Ethylbenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Hexachlorobutadiene	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2-Hexanone	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071206		
Isopropylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
4-Isopropyltoluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Methylene chloride	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Naphthalene	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
n-Propylbenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Styrene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Toluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Trichloroethene (TCE)	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Trichlorofluoromethane	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Vinyl chloride	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
m,p-Xylene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
o-Xylene	ND	0.0312	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %	1	07/24/19 05:01	5035A/8260C	
Toluene-d8 (Surr)		100 %		80-120 %	1	07/24/19 05:01	5035A/8260C	
4-Bromofluorobenzene (Surr)		99 %		80-120 %	1	07/24/19 05:01	5035A/8260C	

DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.657	1.31	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Acrylonitrile	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Benzene	ND	0.00657	0.0131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromochloromethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071206		
Bromodichloromethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromoform	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromomethane	ND	0.657	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2-Butanone (MEK)	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
n-Butylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
sec-Butylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
tert-Butylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Carbon disulfide	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Carbon tetrachloride	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chloroethane	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chloroform	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chloromethane	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2-Chlorotoluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
4-Chlorotoluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Dibromochloromethane	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Dibromomethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Dichlorodifluoromethane	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1-Dichloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1-Dichloroethene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dichloropropane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,3-Dichloropropane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2,2-Dichloropropane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1-Dichloropropene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	

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Philip Nerenberg, Lab Director



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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071206		
trans-1,3-Dichloropropene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Ethylbenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Hexachlorobutadiene	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2-Hexanone	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Isopropylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
4-Isopropyltoluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Methylene chloride	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Naphthalene	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
n-Propylbenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Styrene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Toluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Trichloroethene (TCE)	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Trichlorofluoromethane	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Vinyl chloride	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
m,p-Xylene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
o-Xylene	ND	0.0329	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 80-120 %	1	07/24/19 05:29	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 05:29	5035A/8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/24/19 05:29	5035A/8260C	

DP-6(12-13.5) (A9G0676-20)

Matrix: Soil

Batch: 9071206

Acetone	ND	0.553	1.11	mg/kg dry	50	07/24/19 05:56	5035A/8260C

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071206		
Acrylonitrile	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Benzene	ND	0.00553	0.0111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromochloromethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromodichloromethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromoform	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromomethane	ND	0.553	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2-Butanone (MEK)	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
n-Butylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
sec-Butylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
tert-Butylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Carbon disulfide	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Carbon tetrachloride	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chloroethane	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chloroform	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chloromethane	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2-Chlorotoluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
4-Chlorotoluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Dibromochloromethane	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Dibromomethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Dichlorodifluoromethane	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1-Dichloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1-Dichloroethene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dichloropropane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071206		
1,3-Dichloropropane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2,2-Dichloropropane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1-Dichloropropene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Ethylbenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Hexachlorobutadiene	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2-Hexanone	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Isopropylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
4-Isopropyltoluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Methylene chloride	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Naphthalene	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
n-Propylbenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Styrene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Toluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Trichloroethene (TCE)	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Trichlorofluoromethane	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Vinyl chloride	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
m,p-Xylene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
o-Xylene	ND	0.0276	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 80-120 %	1	07/24/19 05:56	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)		Matrix: Soil			Batch: 9071206			
Surrogate: Toluene-d8 (Surr)		Recovery: 98 %	Limits: 80-120 %	1	07/24/19 05:56	5035A/8260C		
4-Bromofluorobenzene (Surr)		100 %	80-120 %	1	07/24/19 05:56	5035A/8260C		
DP-7(11.5-13) (A9G0676-24)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.518	1.04	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Acrylonitrile	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Benzene	ND	0.00518	0.0104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromochloromethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromodichloromethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromoform	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromomethane	ND	0.518	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2-Butanone (MEK)	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
n-Butylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
sec-Butylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
tert-Butylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Carbon disulfide	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Carbon tetrachloride	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chloroethane	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chloroform	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chloromethane	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2-Chlorotoluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
4-Chlorotoluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Dibromochloromethane	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Dibromomethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Dichlorodifluoromethane	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1-Dichloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071206		
1,1-Dichloroethene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dichloropropane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,3-Dichloropropane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2,2-Dichloropropane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1-Dichloropropene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Ethylbenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Hexachlorobutadiene	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2-Hexanone	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Isopropylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
4-Isopropyltoluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Methylene chloride	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Naphthalene	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
n-Propylbenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Styrene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Toluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Trichloroethene (TCE)	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Trichlorofluoromethane	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-7(11.5-13) (A9G0676-24)		Matrix: Soil			Batch: 9071206			
Vinyl chloride	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
m,p-Xylene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
o-Xylene	ND	0.0259	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 89 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 06:23</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 06:23</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 06:23</i>	<i>5035A/8260C</i>	
DP-8(11.5-13) (A9G0676-28)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.602	1.20	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Acrylonitrile	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Benzene	ND	0.00602	0.0120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromochloromethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromodichloromethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromoform	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromomethane	ND	0.602	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2-Butanone (MEK)	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
n-Butylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
sec-Butylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
tert-Butylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Carbon disulfide	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Carbon tetrachloride	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chloroethane	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chloroform	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chloromethane	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2-Chlorotoluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
4-Chlorotoluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Dibromochloromethane	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Dibromomethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071206		
1,4-Dichlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Dichlorodifluoromethane	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1-Dichloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1-Dichloroethene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dichloropropane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,3-Dichloropropane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2,2-Dichloropropane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1-Dichloropropene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Ethylbenzene	ND	0.0301	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Hexachlorobutadiene	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2-Hexanone	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Isopropylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
4-Isopropyltoluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Methylene chloride	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Naphthalene	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
n-Propylbenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Styrene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Toluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Trichloroethene (TCE)	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-8(11.5-13) (A9G0676-28)		Matrix: Soil			Batch: 9071206			
Trichlorofluoromethane	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Vinyl chloride	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
m,p-Xylene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
o-Xylene	ND	0.0301	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 86 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 07:18</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 07:18</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 07:18</i>	<i>5035A/8260C</i>	
DP-9(11-12.5) (A9G0676-32)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.635	1.27	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Acrylonitrile	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Benzene	ND	0.00635	0.0127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromochloromethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromodichloromethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromoform	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromomethane	ND	0.635	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2-Butanone (MEK)	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
n-Butylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
sec-Butylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
tert-Butylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Carbon disulfide	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Carbon tetrachloride	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chloroethane	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chloroform	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chloromethane	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2-Chlorotoluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
4-Chlorotoluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Dibromochloromethane	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071206		
1,2-Dibromoethane (EDB)	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Dibromomethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Dichlorodifluoromethane	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1-Dichloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1-Dichloroethene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dichloropropane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,3-Dichloropropane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2,2-Dichloropropane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1-Dichloropropene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Ethylbenzene	ND	0.0318	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Hexachlorobutadiene	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2-Hexanone	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Isopropylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
4-Isopropyltoluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Methylene chloride	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Naphthalene	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
n-Propylbenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Styrene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Toluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071206		
1,2,4-Trichlorobenzene	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Trichloroethene (TCE)	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Trichlorofluoromethane	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Vinyl chloride	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
m,p-Xylene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
o-Xylene	ND	0.0318	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 87 %		Limits: 80-120 %	1	07/24/19 07:45	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 07:45	5035A/8260C	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	07/24/19 07:45	5035A/8260C	
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
Acetone	ND	0.648	1.30	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Acrylonitrile	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Benzene	ND	0.00648	0.0130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromochloromethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromodichloromethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromoform	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromomethane	ND	0.648	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
2-Butanone (MEK)	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
n-Butylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
sec-Butylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
tert-Butylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Carbon disulfide	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Carbon tetrachloride	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chloroethane	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chloroform	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chloromethane	ND	0.324	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
2-Chlorotoluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
4-Chlorotoluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Dibromochloromethane	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Dibromomethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Dichlorodifluoromethane	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1-Dichloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dichloropropane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,3-Dichloropropane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
2,2-Dichloropropane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1-Dichloropropene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Ethylbenzene	ND	0.0324	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Hexachlorobutadiene	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
2-Hexanone	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Isopropylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
4-Isopropyltoluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Methylene chloride	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Naphthalene	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
n-Propylbenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Styrene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
1,1,2,2-Tetrachloroethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Toluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Trichloroethene (TCE)	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Trichlorofluoromethane	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Vinyl chloride	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
m,p-Xylene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
o-Xylene	ND	0.0324	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 99 %		Limits: 80-120 %	1	07/24/19 16:13	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 16:13	5035A/8260C	
4-Bromofluorobenzene (Surr)		98 %		80-120 %	1	07/24/19 16:13	5035A/8260C	
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Acetone	ND	0.652	1.30	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Acrylonitrile	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Benzene	ND	0.00652	0.0130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromochloromethane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromodichloromethane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromoform	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromomethane	ND	0.652	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2-Butanone (MEK)	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
n-Butylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
sec-Butylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
tert-Butylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Carbon disulfide	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Carbon tetrachloride	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Chlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Chloroethane	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Chloroform	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Chloromethane	ND	0.326	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2-Chlorotoluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
4-Chlorotoluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Dibromochloromethane	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Dibromomethane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Dichlorodifluoromethane	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1-Dichloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1-Dichloroethene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dichloropropane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,3-Dichloropropane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2,2-Dichloropropane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1-Dichloropropene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Ethylbenzene	ND	0.0326	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Hexachlorobutadiene	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2-Hexanone	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Isopropylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
4-Isopropyltoluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Methylene chloride	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	0.831	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Naphthalene	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
n-Propylbenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Styrene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0652	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Tetrachloroethene (PCE)	0.0978	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Toluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Trichloroethene (TCE)	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Trichlorofluoromethane	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Vinyl chloride	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
m,p-Xylene	ND	0.0652	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
o-Xylene	0.0482	0.0326	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	95 %	<i>Limits:</i>	80-120 %	1	07/24/19 17:08	5035A/8260C
<i>Toluene-d8 (Surr)</i>			99 %		80-120 %	1	07/24/19 17:08	5035A/8260C
<i>4-Bromofluorobenzene (Surr)</i>			100 %		80-120 %	1	07/24/19 17:08	5035A/8260C

DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
Acetone	ND	0.524	1.05	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Acrylonitrile	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Benzene	ND	0.00524	0.0105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromochloromethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromodichloromethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromoform	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromomethane	ND	0.524	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2-Butanone (MEK)	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
n-Butylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
sec-Butylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
tert-Butylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Carbon disulfide	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Carbon tetrachloride	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chloroethane	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chloroform	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chloromethane	ND	0.131	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2-Chlorotoluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
4-Chlorotoluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Dibromochloromethane	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.131	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Dibromomethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Dichlorodifluoromethane	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1-Dichloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1-Dichloroethene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dichloropropane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,3-Dichloropropane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2,2-Dichloropropane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1-Dichloropropene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Ethylbenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Hexachlorobutadiene	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2-Hexanone	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Isopropylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
4-Isopropyltoluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	A-01a
Methylene chloride	ND	0.367	0.367	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Naphthalene	ND	0.105	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
n-Propylbenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Styrene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Toluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.131	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.262	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Trichloroethene (TCE)	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Trichlorofluoromethane	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Vinyl chloride	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
m,p-Xylene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
o-Xylene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 110 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>08/02/19 19:17</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/02/19 19:17</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>93 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/02/19 19:17</i>	<i>5035A/8260C</i>	

DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.565	1.13	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Acrylonitrile	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Benzene	ND	0.00565	0.0113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromochloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromodichloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Bromoform	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromomethane	ND	0.565	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2-Butanone (MEK)	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
n-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
sec-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
tert-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Carbon disulfide	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Carbon tetrachloride	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chloroethane	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chloroform	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chloromethane	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
4-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Dibromochloromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Dibromomethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Dichlorodifluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1-Dichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dichloropropane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,3-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2,2-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Ethylbenzene	0.0153	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
Hexachlorobutadiene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2-Hexanone	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Isopropylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
4-Isopropyltoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Methylene chloride	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	0.351	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
Methyl tert-butyl ether (MTBE)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Naphthalene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
n-Propylbenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Styrene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0565	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Tetrachloroethene (PCE)	0.105	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Toluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Trichloroethene (TCE)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Trichlorofluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,4-Trimethylbenzene	0.0401	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
1,3,5-Trimethylbenzene	0.0571	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Vinyl chloride	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
m,p-Xylene	0.0492	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
o-Xylene	0.0922	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 85 %		Limits: 80-120 %	1	07/24/19 08:13	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 08:13	5035A/8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/24/19 08:13	5035A/8260C	

DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Acetone	ND	0.597	1.19	mg/kg dry	50	08/02/19 19:45	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Acrylonitrile	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Benzene	ND	0.00597	0.0119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromochloromethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromodichloromethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromoform	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromomethane	ND	0.597	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2-Butanone (MEK)	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
n-Butylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
sec-Butylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
tert-Butylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Carbon disulfide	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Carbon tetrachloride	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chloroethane	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chloroform	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chloromethane	ND	0.149	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2-Chlorotoluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
4-Chlorotoluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Dibromochloromethane	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.149	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Dibromomethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Dichlorodifluoromethane	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1-Dichloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1-Dichloroethene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dichloropropane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	

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Philip Nerenberg, Lab Director



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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
1,3-Dichloropropane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2,2-Dichloropropane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1-Dichloropropene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Ethylbenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Hexachlorobutadiene	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2-Hexanone	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Isopropylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
4-Isopropyltoluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Methylene chloride	ND	0.358	0.358	mg/kg dry	50	08/02/19 19:45	5035A/8260C	A-01a
4-Methyl-2-pentanone (MiBK)	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Naphthalene	ND	0.119	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
n-Propylbenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Styrene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Toluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.149	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.299	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Trichloroethene (TCE)	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Trichlorofluoromethane	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Vinyl chloride	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
m,p-Xylene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
o-Xylene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 109 %		Limits: 80-120 %	1	08/02/19 19:45	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Surrogate: Toluene-d8 (Surr)		Recovery: 105 %	Limits: 80-120 %	1	08/02/19 19:45	5035A/8260C		
4-Bromofluorobenzene (Surr)		97 %	80-120 %	1	08/02/19 19:45	5035A/8260C		
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.780	1.56	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Acrylonitrile	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Benzene	ND	0.00780	0.0156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromochloromethane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromodichloromethane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromoform	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromomethane	ND	0.780	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2-Butanone (MEK)	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
n-Butylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
sec-Butylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
tert-Butylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Carbon disulfide	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Carbon tetrachloride	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chloroethane	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chloroform	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chloromethane	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2-Chlorotoluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
4-Chlorotoluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Dibromochloromethane	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Dibromomethane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Dichlorodifluoromethane	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1-Dichloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071206		
1,1-Dichloroethene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dichloropropane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,3-Dichloropropane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2,2-Dichloropropane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1-Dichloropropene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Ethylbenzene	0.0195	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J
Hexachlorobutadiene	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2-Hexanone	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Isopropylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
4-Isopropyltoluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Methylene chloride	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Naphthalene	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
n-Propylbenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Styrene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0780	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Tetrachloroethene (PCE)	0.141	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Toluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Trichloroethene (TCE)	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Trichlorofluoromethane	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,4-Trimethylbenzene	0.0585	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J
1,3,5-Trimethylbenzene	0.0405	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)		Matrix: Soil			Batch: 9071206			
Vinyl chloride	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
m,p-Xylene	0.0468	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J
o-Xylene	0.0678	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 87 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 08:40</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 08:40</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 08:40</i>	<i>5035A/8260C</i>	
DP-13(10-11.5) (A9G0676-47)		Matrix: Soil			Batch: 9080584			
Acetone	ND	0.677	1.35	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Acrylonitrile	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Benzene	ND	0.00677	0.0135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromochloromethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromodichloromethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromoform	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromomethane	ND	0.677	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2-Butanone (MEK)	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
n-Butylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
sec-Butylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
tert-Butylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Carbon disulfide	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Carbon tetrachloride	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chloroethane	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chloroform	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chloromethane	ND	0.169	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2-Chlorotoluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
4-Chlorotoluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Dibromochloromethane	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.169	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Dibromomethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080584		
1,4-Dichlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Dichlorodifluoromethane	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1-Dichloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1-Dichloroethene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dichloropropane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,3-Dichloropropane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2,2-Dichloropropane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1-Dichloropropene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Ethylbenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Hexachlorobutadiene	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2-Hexanone	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Isopropylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
4-Isopropyltoluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Methylene chloride	ND	0.338	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Naphthalene	ND	0.135	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
n-Propylbenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Styrene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Toluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.169	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.338	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Trichloroethene (TCE)	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil	Batch: 9080584			
Trichlorofluoromethane	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Vinyl chloride	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
m,p-Xylene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
o-Xylene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 112 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>08/02/19 20:12</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/02/19 20:12</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>94 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/02/19 20:12</i>	<i>5035A/8260C</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1221	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1232	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1242	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1248	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1254	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1260	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 87 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 09:32</i>	<i>EPA 8082A</i>	
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1221	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1232	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1242	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1248	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1254	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1260	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 88 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 10:42</i>	<i>EPA 8082A</i>	
DP-2(21-22.5) (A9G0676-08)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1221	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1232	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1242	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1248	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1254	0.00942	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	J
Aroclor 1260	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 91 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 11:18</i>	<i>EPA 8082A</i>	
DP-3(10-11.5) (A9G0676-10)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1221	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1232	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	

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Philip Nerenberg, Lab Director

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Polychlorinated Biphenyls by EPA 8082A**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1242	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1248	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1254	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1260	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 88 %		Limits: 60-125 %	1	07/26/19 11:53	EPA 8082A	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1221	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1232	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1242	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1248	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1254	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1260	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 83 %		Limits: 60-125 %	1	07/26/19 12:29	EPA 8082A	
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1221	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1232	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1242	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1248	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1254	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1260	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 91 %		Limits: 60-125 %	1	07/26/19 10:42	EPA 8082A	
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1221	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1232	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1242	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1248	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1254	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	

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Philip Nerenberg, Lab Director



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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1260	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 90 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 11:18</i>	<i>EPA 8082A</i>		
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1221	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1232	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1242	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1248	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1254	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1260	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 92 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 11:53</i>	<i>EPA 8082A</i>		
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1221	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1232	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1242	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1248	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1254	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1260	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 85 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 12:29</i>	<i>EPA 8082A</i>		
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1221	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1232	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1242	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1248	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1254	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1260	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 97 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/29/19 08:44</i>	<i>EPA 8082A</i>		

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1221	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1232	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1242	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1248	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1254	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1260	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 89 %		Limits: 60-125 %	1	07/29/19 09:19	EPA 8082A	
DP-11(6-7.5) (A9G0676-38RE1)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1221	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1232	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1242	0.245	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	P-10
Aroclor 1248	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1254	1.73	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	P-10
Aroclor 1260	0.505	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	P-10
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 92 %		Limits: 60-125 %	10	08/02/19 08:25	EPA 8082A	S-05
DP-11(10-11.5) (A9G0676-39)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1016	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1221	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1232	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1242	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1248	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1254	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1260	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 98 %		Limits: 60-125 %	1	08/22/19 13:08	EPA 8082A	
DP-12(5-6.5) (A9G0676-42RE1)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	
Aroclor 1221	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	
Aroclor 1232	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Polychlorinated Biphenyls by EPA 8082A**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42RE1)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1242	2.27	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	P-10
Aroclor 1248	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	
Aroclor 1254	9.32	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	P-10
Aroclor 1260	1.69	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	P-10
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 90 %		Limits: 60-125 %	50	08/02/19 09:00	EPA 8082A	S-05
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1016	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1221	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1232	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1242	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1248	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1254	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1260	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 94 %		Limits: 60-125 %	1	08/22/19 14:22	EPA 8082A	
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1221	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1232	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1242	1.06	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	P-10
Aroclor 1248	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1254	5.05	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	P-10
Aroclor 1260	0.978	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	P-10
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 88 %		Limits: 60-125 %	50	07/29/19 11:58	EPA 8082A	
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1016	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1221	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1232	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1242	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1248	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1254	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1260	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>08/22/19 14:58</i>	<i>EPA 8082A</i>	

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Anthracene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benz(a)anthracene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Chrysene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Dibenzofuran	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Fluoranthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Fluorene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Naphthalene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Phenanthrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Pyrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 77 %</i>		<i>Limits: 44-120 %</i>	<i>1</i>	<i>07/25/19 15:27</i>	<i>EPA 8270D (SIM)</i>	
<i>p-Terphenyl-d14 (Surr)</i>		<i>90 %</i>		<i>54-127 %</i>	<i>1</i>	<i>07/25/19 15:27</i>	<i>EPA 8270D (SIM)</i>	

DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Anthracene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benz(a)anthracene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Chrysene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071207		
Dibenzofuran	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Fluoranthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Fluorene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Naphthalene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Phenanthrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Pyrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 72 %		Limits: 44-120 %	1	07/25/19 15:53	EPA 8270D (SIM)	
p-Terphenyl-d14 (Surr)		89 %		54-127 %	1	07/25/19 15:53	EPA 8270D (SIM)	
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Anthracene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benz(a)anthracene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Chrysene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Dibenzofuran	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Fluoranthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Fluorene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Naphthalene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Phenanthrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Pyrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 73 %		Limits: 44-120 %	1	07/25/19 16:18	EPA 8270D (SIM)	

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071207		
<i>Surrogate: p-Terphenyl-d14 (Surr)</i>		<i>Recovery: 89 %</i>	<i>Limits: 54-127 %</i>	<i>1</i>	<i>07/25/19 16:18</i>	<i>EPA 8270D (SIM)</i>		
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Anthracene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Benz(a)anthracene	0.00841	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Benzo(a)pyrene	0.00558	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Benzo(b)fluoranthene	0.00583	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Benzo(k)fluoranthene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Chrysene	0.00636	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Dibenz(a,h)anthracene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Dibenzofuran	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Fluoranthene	0.00890	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Fluorene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Naphthalene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Phenanthrene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Pyrene	0.0104	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 80 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>07/25/19 16:44</i>	<i>EPA 8270D (SIM)</i>		
<i>p-Terphenyl-d14 (Surr)</i>		<i>90 %</i>	<i>54-127 %</i>	<i>1</i>	<i>07/25/19 16:44</i>	<i>EPA 8270D (SIM)</i>		

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08RE1)				Matrix: Soil		Batch: 9080555		
Acenaphthene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Acenaphthylene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Anthracene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benz(a)anthracene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(a)pyrene	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Chrysene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Fluoranthene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Fluorene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1-Methylnaphthalene	ND	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Methylnaphthalene	ND	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Naphthalene	ND	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Phenanthrene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Pyrene	0.0169	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	J
Carbazole	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Dibenzofuran	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Chlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dichlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dimethylphenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dinitrophenol	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Methylphenol	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Nitrophenol	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Nitrophenol	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Phenol	0.0302	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	J
2,3,4,6-Tetrachlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08RE1)				Matrix: Soil		Batch: 9080555		
2,3,5,6-Tetrachlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-ethylhexyl)phthalate	0.250	0.220	0.440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	J
Butyl benzyl phthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Diethylphthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Dimethylphthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Di-n-butylphthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Di-n-octyl phthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachlorobenzene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachlorobutadiene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachloroethane	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Chloronaphthalene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Aniline	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Chloroaniline	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Nitroaniline	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
3-Nitroaniline	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Nitroaniline	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Nitrobenzene	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dinitrotoluene	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08RE1)				Matrix: Soil		Batch: 9080555		
2,6-Dinitrotoluene	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	Q-42
Benzoic acid	ND	1.84	3.66	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzyl alcohol	1.07	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Isophorone	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	Q-52
3,3'-Dichlorobenzidine	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,2-Dinitrobenzene	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,3-Dinitrobenzene	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,4-Dinitrobenzene	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Pyridine	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 30 %		Limits: 37-122 %	10	08/02/19 10:30	EPA 8270D	S-03
2-Fluorobiphenyl (Surr)		41 %		44-115 %	10	08/02/19 10:30	EPA 8270D	S-03
Phenol-d6 (Surr)		32 %		33-122 %	10	08/02/19 10:30	EPA 8270D	S-03
p-Terphenyl-d14 (Surr)		80 %		54-127 %	10	08/02/19 10:30	EPA 8270D	
2-Fluorophenol (Surr)		30 %		35-115 %	10	08/02/19 10:30	EPA 8270D	S-03
2,4,6-Tribromophenol (Surr)		74 %		39-132 %	10	08/02/19 10:30	EPA 8270D	
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Acenaphthene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Acenaphthylene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Anthracene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benz(a)anthracene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(a)pyrene	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(b)fluoranthene	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(k)fluoranthene	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Chrysene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Fluoranthene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Fluorene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1-Methylnaphthalene	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Methylnaphthalene	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Naphthalene	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Phenanthrene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Pyrene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Carbazole	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Dibenzofuran	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Chlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dichlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dimethylphenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dinitrophenol	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Methylphenol	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Nitrophenol	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Nitrophenol	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Phenol	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0266	0.0532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Butyl benzyl phthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Diethylphthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Dimethylphthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Di-n-butylphthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Di-n-octyl phthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Hexachlorobenzene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Hexachlorobutadiene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Hexachloroethane	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Chloronaphthalene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Aniline	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Chloroaniline	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Nitroaniline	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
3-Nitroaniline	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Nitroaniline	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Nitrobenzene	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzoic acid	ND	0.222	0.443	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzyl alcohol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Isophorone	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Pyridine	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 44 %		Limits: 37-122 %	1	08/02/19 13:30	EPA 8270D	
2-Fluorobiphenyl (Surr)		53 %		44-115 %	1	08/02/19 13:30	EPA 8270D	
Phenol-d6 (Surr)		51 %		33-122 %	1	08/02/19 13:30	EPA 8270D	
p-Terphenyl-d14 (Surr)		70 %		54-127 %	1	08/02/19 13:30	EPA 8270D	
2-Fluorophenol (Surr)		49 %		35-115 %	1	08/02/19 13:30	EPA 8270D	

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Philip Nerenberg, Lab Director



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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Surrogate: 2,4,6-Tribromophenol (Surr)		Recovery: 76 %		Limits: 39-132 %	1	08/02/19 13:30		EPA 8270D
DP-10(6-7.5) (A9G0676-35RE2)				Matrix: Soil		Batch: 9071408		
Acenaphthene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Acenaphthylene	0.00810	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Anthracene	0.00541	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benz(a)anthracene	0.0366	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(a)pyrene	0.0695	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(b)fluoranthene	0.0779	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(k)fluoranthene	0.0261	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(g,h,i)perylene	0.0701	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Chrysene	0.0576	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Dibenz(a,h)anthracene	0.00669	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Fluoranthene	0.117	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Fluorene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Indeno(1,2,3-cd)pyrene	0.0557	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
1-Methylnaphthalene	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Methylnaphthalene	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Naphthalene	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Phenanthrene	0.0471	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Pyrene	0.164	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Carbazole	ND	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Dibenzofuran	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
4-Chloro-3-methylphenol	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Chlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2,4-Dichlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2,4-Dimethylphenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2,4-Dinitrophenol	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
4,6-Dinitro-2-methylphenol	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Methylphenol	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
3+4-Methylphenol(s)	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Nitrophenol	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
4-Nitrophenol	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Pentachlorophenol (PCP)	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35RE2)				Matrix: Soil		Batch: 9071408		
Phenol	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0218	0.0436	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Butyl benzyl phthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Diethylphthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Dimethylphthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Di-n-butylphthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Di-n-octyl phthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachlorobenzene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachlorobutadiene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachloroethane	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2-Chloronaphthalene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Aniline	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Chloroaniline	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2-Nitroaniline	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
3-Nitroaniline	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Nitroaniline	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
DP-10(6-7.5) (A9G0676-35RE2)				Matrix: Soil		Batch: 9071408			
Nitrobenzene	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
2,4-Dinitrotoluene	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
2,6-Dinitrotoluene	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Benzoic acid	ND	0.182	0.363	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Benzyl alcohol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Isophorone	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Azobenzene (1,2-DPH)	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Bis(2-Ethylhexyl) adipate	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
3,3'-Dichlorobenzidine	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	Q-52	
1,2-Dinitrobenzene	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
1,3-Dinitrobenzene	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
1,4-Dinitrobenzene	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Pyridine	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:		60 %	Limits:	37-122 %	1	07/31/19 20:02	EPA 8270D
2-Fluorobiphenyl (Surr)				76 %		44-115 %	1	07/31/19 20:02	EPA 8270D
Phenol-d6 (Surr)				60 %		33-122 %	1	07/31/19 20:02	EPA 8270D
p-Terphenyl-d14 (Surr)				91 %		54-127 %	1	07/31/19 20:02	EPA 8270D
2-Fluorophenol (Surr)				62 %		35-115 %	1	07/31/19 20:02	EPA 8270D
2,4,6-Tribromophenol (Surr)				86 %		39-132 %	1	07/31/19 20:02	EPA 8270D
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071408			
Acenaphthene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Acenaphthylene	0.244	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Anthracene	0.290	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benz(a)anthracene	1.65	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benzo(a)pyrene	2.87	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benzo(b)fluoranthene	4.26	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benzo(k)fluoranthene	1.35	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D	M-05	
Benzo(g,h,i)perylene	2.32	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Chrysene	2.30	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Dibenz(a,h)anthracene	0.613	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Fluoranthene	2.86	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Fluorene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Indeno(1,2,3-cd)pyrene	2.36	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071408		
1-Methylnaphthalene	ND	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Methylnaphthalene	ND	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Naphthalene	ND	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Phenanthrene	0.967	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Pyrene	3.15	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Carbazole	0.0887	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D	J
Dibenzofuran	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Chlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dichlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dimethylphenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dinitrophenol	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Methylphenol	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
3+4-Methylphenol(s)	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Nitrophenol	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Nitrophenol	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Pentachlorophenol (PCP)	0.598	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	J
Phenol	0.898	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.868	1.74	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Butyl benzyl phthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Diethylphthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Dimethylphthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Di-n-butylphthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Di-n-octyl phthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
N-Nitrosodimethylamine	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071408		
Bis(2-Chloroethyl) ether	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachlorobenzene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachlorobutadiene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachloroethane	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Chloronaphthalene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,2-Dichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,3-Dichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,4-Dichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Aniline	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Chloroaniline	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Nitroaniline	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
3-Nitroaniline	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Nitroaniline	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Nitrobenzene	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dinitrotoluene	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,6-Dinitrotoluene	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Benzoic acid	ND	7.25	14.5	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Benzyl alcohol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Isophorone	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
3,3'-Dichlorobenzidine	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,3-Dinitrobenzene	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,4-Dinitrobenzene	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Pyridine	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 62 %</i>		<i>Limits: 37-122 %</i>	40	07/30/19 23:27	EPA 8270D	S-05
<i>2-Fluorobiphenyl (Surr)</i>		<i>87 %</i>		<i>44-115 %</i>	40	07/30/19 23:27	EPA 8270D	S-05

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)		Matrix: Soil			Batch: 9071408			
<i>Surrogate: Phenol-d6 (Surr)</i>		<i>Recovery:</i>	70 %	<i>Limits:</i>	33-122 %	40	07/30/19 23:27	EPA 8270D S-05
<i>p-Terphenyl-d14 (Surr)</i>			96 %		54-127 %	40	07/30/19 23:27	EPA 8270D S-05
<i>2-Fluorophenol (Surr)</i>			52 %		35-115 %	40	07/30/19 23:27	EPA 8270D S-05
<i>2,4,6-Tribromophenol (Surr)</i>			115 %		39-132 %	40	07/30/19 23:27	EPA 8270D S-05
DP-11(10-11.5) (A9G0676-39RE1)		Matrix: Soil			Batch: 9080555			
Acenaphthene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Acenaphthylene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Anthracene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benz(a)anthracene	0.00291	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzo(a)pyrene	0.00284	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	J
Benzo(b)fluoranthene	0.00301	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	J
Benzo(k)fluoranthene	ND	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzo(g,h,i)perylene	0.00355	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Chrysene	0.00279	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	J
Dibenz(a,h)anthracene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Fluoranthene	0.00611	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Fluorene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Indeno(1,2,3-cd)pyrene	0.00287	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1-Methylnaphthalene	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Methylnaphthalene	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Naphthalene	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Phenanthrene	0.00407	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Pyrene	0.00766	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Carbazole	ND	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Dibenzofuran	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Chlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dichlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dimethylphenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dinitrophenol	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Methylphenol	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080555		
2-Nitrophenol	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Nitrophenol	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Phenol	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0212	0.0424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Butyl benzyl phthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Diethylphthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Dimethylphthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Di-n-butylphthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Di-n-octyl phthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachlorobenzene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachlorobutadiene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachloroethane	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Chloronaphthalene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Aniline	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Chloroaniline	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080555		
2-Nitroaniline	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
3-Nitroaniline	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Nitroaniline	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Nitrobenzene	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzoic acid	ND	0.177	0.353	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzyl alcohol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Isophorone	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Pyridine	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 65 %		Limits: 37-122 %	1	08/02/19 14:06	EPA 8270D	
2-Fluorobiphenyl (Surr)		70 %		44-115 %	1	08/02/19 14:06	EPA 8270D	
Phenol-d6 (Surr)		68 %		33-122 %	1	08/02/19 14:06	EPA 8270D	
p-Terphenyl-d14 (Surr)		82 %		54-127 %	1	08/02/19 14:06	EPA 8270D	
2-Fluorophenol (Surr)		69 %		35-115 %	1	08/02/19 14:06	EPA 8270D	
2,4,6-Tribromophenol (Surr)		92 %		39-132 %	1	08/02/19 14:06	EPA 8270D	
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
Acenaphthene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Acenaphthylene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Anthracene	0.366	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	J
Benz(a)anthracene	2.81	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzo(a)pyrene	5.59	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzo(b)fluoranthene	8.12	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzo(k)fluoranthene	2.63	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	M-05
Benzo(g,h,i)perylene	6.99	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Chrysene	3.55	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Dibenz(a,h)anthracene	1.52	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
Fluoranthene	3.05	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Fluorene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Indeno(1,2,3-cd)pyrene	6.32	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1-Methylnaphthalene	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Methylnaphthalene	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Naphthalene	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Phenanthrene	0.650	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	J
Pyrene	4.29	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Carbazole	ND	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Dibenzofuran	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Chloro-3-methylphenol	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Chlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dichlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dimethylphenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dinitrophenol	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Methylphenol	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
3+4-Methylphenol(s)	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Nitrophenol	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Nitrophenol	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Pentachlorophenol (PCP)	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Phenol	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4,5-Trichlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4,6-Trichlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	5.23	10.5	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Butyl benzyl phthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Diethylphthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Dimethylphthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Di-n-butylphthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Di-n-octyl phthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
N-Nitrosodimethylamine	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
N-Nitroso-di-n-propylamine	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachlorobenzene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachlorobutadiene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachlorocyclopentadiene	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachloroethane	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Chloronaphthalene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,2-Dichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,3-Dichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,4-Dichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Aniline	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Chloroaniline	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Nitroaniline	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
3-Nitroaniline	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Nitroaniline	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Nitrobenzene	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dinitrotoluene	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,6-Dinitrotoluene	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzoic acid	ND	43.7	87.1	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzyl alcohol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Isophorone	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
3,3'-Dichlorobenzidine	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,3-Dinitrobenzene	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,4-Dinitrobenzene	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
Pyridine	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 62 %		Limits: 37-122 %	100	07/31/19 00:03	EPA 8270D	S-05
2-Fluorobiphenyl (Surr)		98 %		44-115 %	100	07/31/19 00:03	EPA 8270D	S-05
Phenol-d6 (Surr)		50 %		33-122 %	100	07/31/19 00:03	EPA 8270D	S-05
p-Terphenyl-d14 (Surr)		108 %		54-127 %	100	07/31/19 00:03	EPA 8270D	S-05
2-Fluorophenol (Surr)		57 %		35-115 %	100	07/31/19 00:03	EPA 8270D	S-05
2,4,6-Tribromophenol (Surr)		230 %		39-132 %	100	07/31/19 00:03	EPA 8270D	S-05
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080555		
Acenaphthene	0.00249	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	J
Acenaphthylene	0.00359	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Anthracene	0.00447	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benz(a)anthracene	0.0155	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benzo(a)pyrene	0.0124	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benzo(b)fluoranthene	0.0130	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	M-05
Benzo(k)fluoranthene	0.00477	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	M-05
Benzo(g,h,i)perylene	0.00886	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Chrysene	0.0167	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Dibenz(a,h)anthracene	0.00167	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	J
Fluoranthene	0.0274	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Fluorene	0.00194	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	J
Indeno(1,2,3-cd)pyrene	0.00859	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1-Methylnaphthalene	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Methylnaphthalene	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Naphthalene	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Phenanthrene	0.0200	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Pyrene	0.0375	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Carbazole	ND	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Dibenzofuran	ND	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Chlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dichlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dimethylphenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dinitrophenol	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080555		
4,6-Dinitro-2-methylphenol	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Methylphenol	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Nitrophenol	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Nitrophenol	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Phenol	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0207	0.0413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Butyl benzyl phthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Diethylphthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Dimethylphthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Di-n-butylphthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Di-n-octyl phthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachlorobenzene	ND	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachlorobutadiene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachloroethane	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Chloronaphthalene	ND	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	

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Philip Nerenberg, Lab Director

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080555			
4-Chlorophenyl phenyl ether	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	Q-52	
Aniline	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
4-Chloroaniline	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
2-Nitroaniline	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
3-Nitroaniline	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
4-Nitroaniline	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Nitrobenzene	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
2,4-Dinitrotoluene	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
2,6-Dinitrotoluene	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Benzoic acid	ND	0.172	0.344	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Benzyl alcohol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Isophorone	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Azobenzene (1,2-DPH)	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Bis(2-Ethylhexyl) adipate	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
3,3'-Dichlorobenzidine	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
1,2-Dinitrobenzene	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
1,3-Dinitrobenzene	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
1,4-Dinitrobenzene	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Pyridine	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D		
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:		58 %	Limits:	37-122 %	1	08/02/19 14:42	EPA 8270D
2-Fluorobiphenyl (Surr)				64 %		44-115 %	1	08/02/19 14:42	EPA 8270D
Phenol-d6 (Surr)				64 %		33-122 %	1	08/02/19 14:42	EPA 8270D
p-Terphenyl-d14 (Surr)				81 %		54-127 %	1	08/02/19 14:42	EPA 8270D
2-Fluorophenol (Surr)				62 %		35-115 %	1	08/02/19 14:42	EPA 8270D
2,4,6-Tribromophenol (Surr)				89 %		39-132 %	1	08/02/19 14:42	EPA 8270D
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408			
Acenaphthene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	J	
Acenaphthylene	0.355	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D		
Anthracene	0.324	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D		
Benz(a)anthracene	2.44	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D		
Benzo(a)pyrene	6.23	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D		
Benzo(b)fluoranthene	8.23	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D	M-05	
Benzo(k)fluoranthene	2.70	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D		

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Philip Nerenberg, Lab Director



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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
Benzo(g,h,i)perylene	6.75	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Chrysene	3.04	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Dibenz(a,h)anthracene	1.52	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Fluoranthene	2.49	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Fluorene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Indeno(1,2,3-cd)pyrene	6.33	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1-Methylnaphthalene	ND	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Methylnaphthalene	ND	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Naphthalene	ND	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Phenanthrene	0.695	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Pyrene	4.02	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Carbazole	ND	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Dibenzofuran	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Chloro-3-methylphenol	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Chlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dichlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dimethylphenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dinitrophenol	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Methylphenol	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
3+4-Methylphenol(s)	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Nitrophenol	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Nitrophenol	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Pentachlorophenol (PCP)	2.01	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	J
Phenol	0.767	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	2.61	5.21	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Butyl benzyl phthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Diethylphthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Dimethylphthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	

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Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
Di-n-butylphthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Di-n-octyl phthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
N-Nitrosodimethylamine	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachlorobenzene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachlorobutadiene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachloroethane	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Chloronaphthalene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,2-Dichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,3-Dichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,4-Dichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Aniline	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Chloroaniline	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Nitroaniline	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
3-Nitroaniline	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Nitroaniline	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Nitrobenzene	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dinitrotoluene	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,6-Dinitrotoluene	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Benzoic acid	ND	21.8	43.4	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Benzyl alcohol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Isophorone	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
3,3'-Dichlorobenzidine	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	Q-52

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
1,2-Dinitrobenzene	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,3-Dinitrobenzene	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,4-Dinitrobenzene	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Pyridine	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	67 %	<i>Limits:</i>	37-122 %	100	07/31/19 00:40	EPA 8270D S-05
<i>2-Fluorobiphenyl (Surr)</i>			87 %		44-115 %	100	07/31/19 00:40	EPA 8270D S-05
<i>Phenol-d6 (Surr)</i>			54 %		33-122 %	100	07/31/19 00:40	EPA 8270D S-05
<i>p-Terphenyl-d14 (Surr)</i>			95 %		54-127 %	100	07/31/19 00:40	EPA 8270D S-05
<i>2-Fluorophenol (Surr)</i>			59 %		35-115 %	100	07/31/19 00:40	EPA 8270D S-05
<i>2,4,6-Tribromophenol (Surr)</i>			160 %		39-132 %	100	07/31/19 00:40	EPA 8270D S-05
DP-13(10-11.5) (A9G0676-47RE2)				Matrix: Soil		Batch: 9080555		
Acenaphthene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Acenaphthylene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Anthracene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benz(a)anthracene	0.00362	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzo(a)pyrene	0.00264	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Benzo(b)fluoranthene	0.00275	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Benzo(k)fluoranthene	ND	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzo(g,h,i)perylene	0.00205	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Chrysene	0.00345	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Fluoranthene	0.00467	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Fluorene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Indeno(1,2,3-cd)pyrene	0.00200	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
1-Methylnaphthalene	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Methylnaphthalene	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Naphthalene	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Phenanthrene	0.00254	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Pyrene	0.00640	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Carbazole	ND	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Dibenzofuran	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Chlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47RE2)				Matrix: Soil		Batch: 9080555		
2,4-Dichlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4-Dimethylphenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4-Dinitrophenol	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Methylphenol	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Nitrophenol	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Nitrophenol	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Phenol	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0210	0.0420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Butyl benzyl phthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Diethylphthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Dimethylphthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Di-n-butylphthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Di-n-octyl phthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachlorobenzene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachlorobutadiene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachloroethane	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Chloronaphthalene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47RE2)				Matrix: Soil		Batch: 9080555		
1,4-Dichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Aniline	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Chloroaniline	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Nitroaniline	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
3-Nitroaniline	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Nitroaniline	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Nitrobenzene	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzoic acid	ND	0.175	0.350	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzyl alcohol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Isophorone	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Pyridine	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	73 %	<i>Limits:</i>	37-122 %	1	08/02/19 12:18	EPA 8270D
<i>2-Fluorobiphenyl (Surr)</i>			78 %		44-115 %	1	08/02/19 12:18	EPA 8270D
<i>Phenol-d6 (Surr)</i>			78 %		33-122 %	1	08/02/19 12:18	EPA 8270D
<i>p-Terphenyl-d14 (Surr)</i>			86 %		54-127 %	1	08/02/19 12:18	EPA 8270D
<i>2-Fluorophenol (Surr)</i>			77 %		35-115 %	1	08/02/19 12:18	EPA 8270D
<i>2,4,6-Tribromophenol (Surr)</i>			102 %		39-132 %	1	08/02/19 12:18	EPA 8270D

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02) Matrix: Soil								
Batch: 9071299								
Arsenic	2.48	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Barium	102	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Cadmium	0.359	0.113	0.226	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Chromium	11.0	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Lead	2.50	0.113	0.226	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Mercury	ND	0.0452	0.0904	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Selenium	ND	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Silver	ND	0.113	0.226	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
DP-2(11-12.5) (A9G0676-06) Matrix: Soil								
Batch: 9071299								
Arsenic	2.56	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Barium	61.4	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	Q-42
Cadmium	0.357	0.110	0.221	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Chromium	9.23	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Lead	2.17	0.110	0.221	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Mercury	ND	0.0441	0.0883	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Selenium	ND	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Silver	ND	0.110	0.221	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
DP-3(10-11.5) (A9G0676-10) Matrix: Soil								
Batch: 9071299								
Arsenic	2.20	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Barium	61.4	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Cadmium	0.297	0.112	0.224	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Chromium	8.36	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Lead	2.09	0.112	0.224	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Mercury	0.0639	0.0448	0.0895	mg/kg dry	10	07/30/19 18:30	EPA 6020A	J
Selenium	ND	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Silver	ND	0.112	0.224	mg/kg dry	10	07/30/19 18:30	EPA 6020A	

DP-4(11.5-13) (A9G0676-13)

Matrix: Soil

Batch: 9071299

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-4(11.5-13) (A9G0676-13) Matrix: Soil								
Arsenic	2.55	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Barium	59.9	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Cadmium	0.381	0.109	0.218	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Chromium	9.53	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Lead	2.41	0.109	0.218	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Mercury	ND	0.0435	0.0871	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Selenium	ND	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Silver	ND	0.109	0.218	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
DP-5(10-11.5) (A9G0676-16) Matrix: Soil								
Batch: 9071299								
Arsenic	2.39	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Barium	67.4	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Cadmium	0.383	0.116	0.233	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Chromium	10.4	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Lead	2.62	0.116	0.233	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Mercury	ND	0.0465	0.0930	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Selenium	ND	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Silver	ND	0.116	0.233	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
DP-10(6-7.5) (A9G0676-35) Matrix: Soil								
Batch: 9071299								
Antimony	ND	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Arsenic	2.12	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Barium	75.7	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Beryllium	0.272	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Cadmium	0.362	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Chromium	11.5	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Copper	14.1	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Lead	3.42	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Mercury	ND	0.0495	0.0991	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Nickel	17.0	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Selenium	ND	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Silver	ND	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	

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Philip Nerenberg, Lab Director

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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)								
Matrix: Soil								
Thallium	ND	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Zinc	39.3	2.48	4.95	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
DP-11(6-7.5) (A9G0676-38)								
Matrix: Soil								
Batch: 9071299								
Antimony	6.74	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Arsenic	51.3	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Beryllium	ND	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Cadmium	1.05	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Chromium	201	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Lead	480	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Nickel	10.3	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Selenium	ND	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Silver	0.315	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Thallium	ND	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Zinc	1650	2.21	4.43	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
DP-11(6-7.5) (A9G0676-38RE1)								
Matrix: Soil								
Batch: 9071299								
Copper	2410	5.54	11.1	mg/kg dry	100	07/31/19 17:09	EPA 6020A	
Mercury	14.9	0.443	0.886	mg/kg dry	100	07/31/19 17:09	EPA 6020A	
DP-11(10-11.5) (A9G0676-39)								
Matrix: Soil								
Batch: 9081214								
Antimony	ND	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Arsenic	1.84	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Beryllium	0.280	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Cadmium	ND	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Chromium	6.49	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Copper	10.7	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Lead	1.96	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Mercury	ND	0.0461	0.0922	mg/kg dry	10	08/22/19 19:47	EPA 6020A	H-06
Nickel	12.0	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Selenium	ND	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39)				Matrix: Soil				
Silver	ND	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Thallium	ND	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Zinc	26.3	2.30	4.61	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil				
Batch: 9071299								
Arsenic	172	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Beryllium	ND	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Cadmium	1.81	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Chromium	212	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Nickel	24.6	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Selenium	ND	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Silver	0.215	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	J
Thallium	ND	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
DP-12(5-6.5) (A9G0676-42RE1)				Matrix: Soil				
Batch: 9071299								
Antimony	102	10.9	21.8	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Copper	4240	10.9	21.8	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Lead	1110	2.18	4.37	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Mercury	36.0	0.874	1.75	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Zinc	2790	43.7	87.4	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil				
Batch: 9081214								
Antimony	ND	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Arsenic	2.31	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Beryllium	0.262	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Cadmium	ND	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Chromium	9.15	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Copper	12.2	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Lead	2.41	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Mercury	ND	0.0447	0.0894	mg/kg dry	10	08/22/19 19:51	EPA 6020A	H-06
Nickel	15.6	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43)								
Matrix: Soil								
Selenium	ND	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Silver	ND	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Thallium	ND	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Zinc	33.3	2.23	4.47	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
DP-13(5-6.5) (A9G0676-46)								
Matrix: Soil								
Batch: 9071299								
Antimony	2.26	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Arsenic	55.1	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Beryllium	0.243	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	J
Cadmium	0.902	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Chromium	114	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Lead	475	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Nickel	23.0	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Selenium	ND	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Silver	0.136	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	J
Thallium	ND	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Zinc	936	2.57	5.14	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
DP-13(5-6.5) (A9G0676-46RE1)								
Matrix: Soil								
Batch: 9071299								
Copper	2320	6.43	12.9	mg/kg dry	100	07/31/19 17:18	EPA 6020A	
Mercury	19.7	0.514	1.03	mg/kg dry	100	07/31/19 17:18	EPA 6020A	
DP-13(10-11.5) (A9G0676-47)								
Matrix: Soil								
Batch: 9081214								
Antimony	ND	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Arsenic	1.87	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Beryllium	0.233	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Cadmium	ND	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Chromium	7.70	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Copper	11.1	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Lead	2.11	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Mercury	ND	0.0463	0.0927	mg/kg dry	10	08/22/19 19:55	EPA 6020A	H-06

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil				
Nickel	13.3	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Selenium	ND	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Silver	ND	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Thallium	ND	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Zinc	29.3	2.32	4.63	mg/kg dry	10	08/22/19 19:55	EPA 6020A	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071168		
% Solids	89.8	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071168		
% Solids	91.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071168		
% Solids	89.6	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080517		
% Solids	73.9	1.00	1.00	% by Weight	1	08/02/19 08:43	EPA 8000C	
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071168		
% Solids	92.3	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071168		
% Solids	90.6	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071168		
% Solids	92.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071168		
% Solids	88.4	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071168		
% Solids	92.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071168		
% Solids	93.2	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071168		
% Solids	92.4	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071168		
% Solids	91.2	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071168		

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071168		
% Solids	88.0	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-10(16.5-18) (A9G0676-37)				Matrix: Soil		Batch: 9080572		
% Solids	89.1	1.00	1.00	% by Weight	1	08/05/19 13:46	EPA 8000C	
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071168		
% Solids	90.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-11(10-11.5) (A9G0676-39)				Matrix: Soil		Batch: 9080572		
% Solids	92.7	1.00	1.00	% by Weight	1	08/05/19 13:46	EPA 8000C	
DP-11(16.5-18) (A9G0676-40)				Matrix: Soil		Batch: 9080658		
% Solids	89.4	1.00	1.00	% by Weight	1	08/07/19 08:36	EPA 8000C	
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071168		
% Solids	91.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil		Batch: 9080640		
% Solids	91.5	1.00	1.00	% by Weight	1	08/06/19 08:28	EPA 8000C	
DP-12(16.5-18) (A9G0676-44)				Matrix: Soil		Batch: 9080572		
% Solids	92.0	1.00	1.00	% by Weight	1	08/05/19 13:46	EPA 8000C	
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071168		
% Solids	76.6	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080517		
% Solids	91.7	1.00	1.00	% by Weight	1	08/02/19 08:43	EPA 8000C	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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 9071293 - EPA 3546 (Fuels)						Soil						
Blank (9071293-BLK1)			Prepared: 07/25/19 12:58 Analyzed: 07/25/19 22:16									
NWTPH-Dx												
Diesel	ND	8.33	16.7	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	16.7	33.3	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	16.7	33.3	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
LCS (9071293-BS1)			Prepared: 07/25/19 12:58 Analyzed: 07/25/19 22:38									
NWTPH-Dx												
Diesel	111	10.0	20.0	mg/kg wet	1	125	---	89	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9071293-DUP1)			Prepared: 07/25/19 12:58 Analyzed: 07/25/19 23:22									
QC Source Sample: Non-SDG (A9G0672-02)												
Diesel	10.9	9.91	19.8	mg/kg dry	1	---	12.2	---	---	11	30%	J
Oil	ND	19.8	39.6	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	19.8	39.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9071293-DUP2)			Prepared: 07/25/19 12:58 Analyzed: 07/26/19 10:30									
QC Source Sample: Non-SDG (A9G0766-02)												
Diesel	ND	10.4	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	20.8	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	20.8	41.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
Batch 9080541 - EPA 3546 (Fuels)						Soil						
Blank (9080541-BLK1)			Prepared: 08/01/19 12:56 Analyzed: 08/01/19 20:33									
NWTPH-Dx												
Diesel	ND	8.33	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	16.7	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 110 %		Limits: 50-150 %		Dilution: 1x						

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080541 - EPA 3546 (Fuels)						Soil						
LCS (9080541-BS1)			Prepared: 08/01/19 12:56		Analyzed: 08/01/19 20:54							
<u>NWTPH-Dx</u>												
Diesel	106	10.0	25.0	mg/kg wet	1	125	---	85	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 113 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9080541-DUP1)			Prepared: 08/01/19 12:56		Analyzed: 08/01/19 21:39							
<u>QC Source Sample: DP-2(25-26.5) (A9G0676-09)</u>												
<u>NWTPH-Dx</u>												
Diesel	ND	11.7	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	23.5	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 108 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9080541-DUP2)			Prepared: 08/01/19 17:48		Analyzed: 08/02/19 00:58							
<u>QC Source Sample: Non-SDG (A9H0030-02)</u>												
Diesel	ND	10.3	20.5	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	20.5	41.1	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)			Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:38									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		91 %		50-150 %		"						
LCS (9071206-BS2)			Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:10									
NWTPH-Gx (MS)												
Gasoline Range Organics	23.2	2.50	5.00	mg/kg wet	50	25.0	---	93	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		93 %		50-150 %		"						
Duplicate (9071206-DUP1)			Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44									
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	3.10	6.20	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 85 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		83 %		50-150 %		"						
Duplicate (9071206-DUP2)			Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51									
QC Source Sample: DP-7(11.5-13) (A9G0676-24)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	2.54	5.08	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		89 %		50-150 %		"						

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****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 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00 Analyzed: 07/24/19 14:51									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		89 %		50-150 %		"						
LCS (9071232-BS1)			Prepared: 07/24/19 12:00 Analyzed: 07/24/19 13:28									
NWTPH-Gx (MS)												
Gasoline Range Organics	24.0	2.50	5.00	mg/kg wet	50	25.0	---	96	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						
Duplicate (9071232-DUP1)			Prepared: 07/19/19 10:35 Analyzed: 07/24/19 16:40									
QC Source Sample: DP-10(6-7.5) (A9G0676-35)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	3.24	6.47	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 85 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		83 %		50-150 %		"						

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Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****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 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00 Analyzed: 08/02/19 13:12									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 105 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"						
LCS (9080584-BS2)			Prepared: 08/02/19 11:00 Analyzed: 08/02/19 12:45									
NWTPH-Gx (MS)												
Gasoline Range Organics	26.2	2.50	5.00	mg/kg wet	50	25.0	---	105	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		107 %		50-150 %		"						
Duplicate (9080584-DUP1)			Prepared: 07/31/19 18:15 Analyzed: 08/02/19 17:29									V-15
QC Source Sample: Non-SDG (A9G0983-05RE1)												
Gasoline Range Organics	4750	94.0	188	mg/kg wet	2000	---	4560	---	---	4	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 192 %		Limits: 50-150 %		Dilution: 1x						S-02
1,4-Difluorobenzene (Sur)		121 %		50-150 %		"						

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)			Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:38									
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)			Prepared: 07/23/19 21:30		Analyzed: 07/23/19 22:38							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 89 %		Limits: 80-120 %		Dilution: 1x						

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9450 SW Commerce Circle
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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)			Prepared: 07/23/19 21:30		Analyzed: 07/23/19 22:38							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
LCS (9071206-BS1)			Prepared: 07/23/19 21:30		Analyzed: 07/23/19 21:43							
5035A/8260C												
Acetone	2.00	0.500	1.00	mg/kg wet	50	2.00	---	100	80-120%	---	---	
Acrylonitrile	0.894	0.0500	0.100	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Benzene	0.870	0.00500	0.0100	mg/kg wet	50	1.00	---	87	80-120%	---	---	
Bromobenzene	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Bromochloromethane	0.929	0.0250	0.0500	mg/kg wet	50	1.00	---	93	80-120%	---	---	
Bromodichloromethane	1.15	0.0250	0.0500	mg/kg wet	50	1.00	---	115	80-120%	---	---	
Bromoform	1.40	0.0500	0.100	mg/kg wet	50	1.00	---	140	80-120%	---	---	Q-56
Bromomethane	1.20	0.500	0.500	mg/kg wet	50	1.00	---	120	80-120%	---	---	
2-Butanone (MEK)	1.84	0.250	0.500	mg/kg wet	50	2.00	---	92	80-120%	---	---	
n-Butylbenzene	1.05	0.0250	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
sec-Butylbenzene	0.994	0.0250	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
tert-Butylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Carbon disulfide	0.889	0.250	0.500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Carbon tetrachloride	1.19	0.0250	0.0500	mg/kg wet	50	1.00	---	119	80-120%	---	---	
Chlorobenzene	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Chloroethane	1.04	0.250	0.500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloroform	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloromethane	0.820	0.125	0.250	mg/kg wet	50	1.00	---	82	80-120%	---	---	
2-Chlorotoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
4-Chlorotoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dibromochloromethane	1.25	0.0500	0.100	mg/kg wet	50	1.00	---	125	80-120%	---	---	Q-56
1,2-Dibromo-3-chloropropane	1.03	0.125	0.250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.10	0.0250	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
Dibromomethane	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,4-Dichlorobenzene	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dichlorodifluoromethane	1.06	0.0500	0.100	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,1-Dichloroethane	0.943	0.0125	0.0250	mg/kg wet	50	1.00	---	94	80-120%	---	---	

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EPA ID: OR01039

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
LCS (9071206-BS1)						Prepared: 07/23/19 21:30 Analyzed: 07/23/19 21:43						
1,2-Dichloroethane (EDC)	1.11	0.0125	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
1,1-Dichloroethene	0.969	0.0125	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
cis-1,2-Dichloroethene	0.999	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
trans-1,2-Dichloroethene	0.990	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,2-Dichloropropane	0.894	0.0125	0.0250	mg/kg wet	50	1.00	---	89	80-120%	---	---	
1,3-Dichloropropane	1.10	0.0250	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
2,2-Dichloropropane	1.19	0.0250	0.0500	mg/kg wet	50	1.00	---	119	80-120%	---	---	
1,1-Dichloropropene	0.977	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
cis-1,3-Dichloropropene	1.09	0.0250	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
trans-1,3-Dichloropropene	1.17	0.0250	0.0500	mg/kg wet	50	1.00	---	117	80-120%	---	---	
Ethylbenzene	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Hexachlorobutadiene	1.18	0.0500	0.100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
2-Hexanone	1.97	0.250	0.500	mg/kg wet	50	2.00	---	99	80-120%	---	---	
Isopropylbenzene	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
4-Isopropyltoluene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Methylene chloride	0.872	0.125	0.250	mg/kg wet	50	1.00	---	87	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.05	0.250	0.500	mg/kg wet	50	2.00	---	103	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.962	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Naphthalene	1.05	0.0500	0.100	mg/kg wet	50	1.00	---	105	80-120%	---	---	
n-Propylbenzene	0.994	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Styrene	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.17	0.0125	0.0250	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.867	0.0250	0.0500	mg/kg wet	50	1.00	---	87	80-120%	---	---	
Tetrachloroethene (PCE)	1.13	0.0125	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	
Toluene	0.982	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	1.07	0.125	0.250	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,2,4-Trichlorobenzene	1.09	0.125	0.250	mg/kg wet	50	1.00	---	109	80-120%	---	---	
1,1,1-Trichloroethane	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,1,2-Trichloroethane	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Trichloroethene (TCE)	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Trichlorofluoromethane	1.43	0.0500	0.100	mg/kg wet	50	1.00	---	143	80-120%	---	---	Q-56
1,2,3-Trichloropropane	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,2,4-Trimethylbenzene	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,3,5-Trimethylbenzene	0.999	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
LCS (9071206-BS1)			Prepared: 07/23/19 21:30		Analyzed: 07/23/19 21:43							
Vinyl chloride	0.964	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
m,p-Xylene	2.12	0.0250	0.0500	mg/kg wet	50	2.00	---	106	80-120%	---	---	
o-Xylene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 90 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (9071206-DUP1)

Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44

QC Source Sample: DP-1(11-12.5) (A9G0676-02)**5035A/8260C**

Acetone	ND	0.620	1.24	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00620	0.0124	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.620	0.620	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP1)			Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44									
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
1,2-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0316	0.0316	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP1)			Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44									
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
1,1,2-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0316	0.0316	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (9071206-DUP2) Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51**QC Source Sample: DP-7(11.5-13) (A9G0676-24)****5035A/8260C**

Acetone	ND	0.508	1.02	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	0.00508	0.0102	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.508	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP2)			Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51									
QC Source Sample: DP-7(11.5-13) (A9G0676-24)												
Chloromethane	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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EPA ID: OR01039**GeoDesign, Inc.**

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP2)			Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51									
QC Source Sample: DP-7(11.5-13) (A9G0676-24)												
1,1,1,2-Tetrachloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0259	0.0259	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 88 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						

Matrix Spike (9071206-MS1)

Prepared: 07/19/19 11:35 Analyzed: 07/24/19 09:08

QC Source Sample: DP-13(5-6.5) (A9G0676-46)**5035A/8260C**

Acetone	3.39	0.780	1.56	mg/kg dry	50	3.12	ND	109	36-164%	---	---	
Acrylonitrile	1.28	0.0780	0.156	mg/kg dry	50	1.56	ND	82	65-134%	---	---	
Benzene	1.30	0.00780	0.0156	mg/kg dry	50	1.56	ND	83	77-121%	---	---	
Bromobenzene	1.52	0.0195	0.0390	mg/kg dry	50	1.56	ND	97	78-121%	---	---	
Bromochloromethane	1.39	0.0390	0.0780	mg/kg dry	50	1.56	ND	89	78-125%	---	---	
Bromodichloromethane	1.67	0.0390	0.0780	mg/kg dry	50	1.56	ND	107	75-127%	---	---	
Bromoform	1.97	0.0780	0.156	mg/kg dry	50	1.56	ND	127	67-132%	---	---	Q-54h
Bromomethane	1.68	0.780	0.780	mg/kg dry	50	1.56	ND	108	53-143%	---	---	
2-Butanone (MEK)	2.71	0.390	0.780	mg/kg dry	50	3.12	ND	87	51-148%	---	---	
n-Butylbenzene	1.65	0.0390	0.0780	mg/kg dry	50	1.56	ND	106	70-128%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Matrix Spike (9071206-MS1)			Prepared: 07/19/19 11:35		Analyzed: 07/24/19 09:08							
QC Source Sample: DP-13(5-6.5) (A9G0676-46)												
sec-Butylbenzene	1.57	0.0390	0.0780	mg/kg dry	50	1.56	ND	101	73-126%	---	---	
tert-Butylbenzene	1.67	0.0390	0.0780	mg/kg dry	50	1.56	ND	107	73-125%	---	---	
Carbon disulfide	1.30	0.390	0.780	mg/kg dry	50	1.56	ND	84	63-132%	---	---	
Carbon tetrachloride	1.79	0.0390	0.0780	mg/kg dry	50	1.56	ND	115	70-135%	---	---	
Chlorobenzene	1.57	0.0195	0.0390	mg/kg dry	50	1.56	ND	101	79-120%	---	---	
Chloroethane	1.65	0.390	0.780	mg/kg dry	50	1.56	ND	106	59-139%	---	---	
Chloroform	1.58	0.0390	0.0780	mg/kg dry	50	1.56	ND	101	78-123%	---	---	
Chloromethane	1.15	0.195	0.390	mg/kg dry	50	1.56	ND	74	50-136%	---	---	
2-Chlorotoluene	1.54	0.0390	0.0780	mg/kg dry	50	1.56	ND	99	75-122%	---	---	
4-Chlorotoluene	1.49	0.0390	0.0780	mg/kg dry	50	1.56	ND	96	72-124%	---	---	
Dibromochloromethane	1.90	0.0780	0.156	mg/kg dry	50	1.56	ND	122	74-126%	---	---	Q-54n
1,2-Dibromo-3-chloropropane	1.57	0.195	0.390	mg/kg dry	50	1.56	ND	101	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.61	0.0390	0.0780	mg/kg dry	50	1.56	ND	103	78-122%	---	---	
Dibromomethane	1.51	0.0390	0.0780	mg/kg dry	50	1.56	ND	97	78-125%	---	---	
1,2-Dichlorobenzene	1.55	0.0195	0.0390	mg/kg dry	50	1.56	ND	100	78-121%	---	---	
1,3-Dichlorobenzene	1.55	0.0195	0.0390	mg/kg dry	50	1.56	ND	99	77-121%	---	---	
1,4-Dichlorobenzene	1.50	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	75-120%	---	---	
Dichlorodifluoromethane	1.65	0.0780	0.156	mg/kg dry	50	1.56	ND	106	29-149%	---	---	
1,1-Dichloroethane	1.41	0.0195	0.0390	mg/kg dry	50	1.56	ND	90	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.62	0.0195	0.0390	mg/kg dry	50	1.56	ND	104	73-128%	---	---	
1,1-Dichloroethene	1.49	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	70-131%	---	---	
cis-1,2-Dichloroethene	1.48	0.0195	0.0390	mg/kg dry	50	1.56	ND	95	77-123%	---	---	
trans-1,2-Dichloroethene	1.49	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	74-125%	---	---	
1,2-Dichloropropane	1.30	0.0195	0.0390	mg/kg dry	50	1.56	ND	83	76-123%	---	---	
1,3-Dichloropropane	1.61	0.0390	0.0780	mg/kg dry	50	1.56	ND	103	77-121%	---	---	
2,2-Dichloropropane	1.42	0.0390	0.0780	mg/kg dry	50	1.56	ND	91	67-133%	---	---	
1,1-Dichloropropene	1.39	0.0390	0.0780	mg/kg dry	50	1.56	ND	89	76-125%	---	---	
cis-1,3-Dichloropropene	1.60	0.0390	0.0780	mg/kg dry	50	1.56	ND	102	74-126%	---	---	
trans-1,3-Dichloropropene	1.71	0.0390	0.0780	mg/kg dry	50	1.56	ND	110	71-130%	---	---	
Ethylbenzene	1.59	0.0195	0.0390	mg/kg dry	50	1.56	ND	101	76-122%	---	---	
Hexachlorobutadiene	2.47	0.0780	0.156	mg/kg dry	50	1.56	ND	158	61-135%	---	---	Q-01
2-Hexanone	2.98	0.390	0.780	mg/kg dry	50	3.12	ND	96	53-145%	---	---	
Isopropylbenzene	1.62	0.0390	0.0780	mg/kg dry	50	1.56	ND	104	68-134%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Matrix Spike (9071206-MS1)			Prepared: 07/19/19 11:35		Analyzed: 07/24/19 09:08							
QC Source Sample: DP-13(5-6.5) (A9G0676-46)												
4-Isopropyltoluene	1.62	0.0390	0.0780	mg/kg dry	50	1.56	ND	104	73-127%	---	---	Q-54i
Methylene chloride	1.33	0.195	0.390	mg/kg dry	50	1.56	ND	85	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3.32	0.390	0.780	mg/kg dry	50	3.12	ND	107	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.42	0.0390	0.0780	mg/kg dry	50	1.56	ND	91	73-125%	---	---	
Naphthalene	1.64	0.0780	0.156	mg/kg dry	50	1.56	ND	105	62-129%	---	---	
n-Propylbenzene	1.50	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	73-125%	---	---	
Styrene	1.55	0.0390	0.0780	mg/kg dry	50	1.56	ND	100	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.77	0.0195	0.0390	mg/kg dry	50	1.56	ND	114	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1.44	0.0390	0.0780	mg/kg dry	50	1.56	ND	89	70-124%	---	---	
Tetrachloroethene (PCE)	1.83	0.0195	0.0390	mg/kg dry	50	1.56	0.141	108	73-128%	---	---	
Toluene	1.50	0.0390	0.0780	mg/kg dry	50	1.56	ND	96	77-121%	---	---	
1,2,3-Trichlorobenzene	1.71	0.195	0.390	mg/kg dry	50	1.56	ND	110	66-130%	---	---	
1,2,4-Trichlorobenzene	1.72	0.195	0.390	mg/kg dry	50	1.56	ND	110	67-129%	---	---	
1,1,1-Trichloroethane	1.65	0.0195	0.0390	mg/kg dry	50	1.56	ND	106	73-130%	---	---	
1,1,2-Trichloroethane	1.55	0.0195	0.0390	mg/kg dry	50	1.56	ND	100	78-121%	---	---	
Trichloroethene (TCE)	1.53	0.0195	0.0390	mg/kg dry	50	1.56	ND	98	77-123%	---	---	
Trichlorofluoromethane	2.07	0.0780	0.156	mg/kg dry	50	1.56	ND	133	62-140%	---	---	
1,2,3-Trichloropropane	1.60	0.0390	0.0780	mg/kg dry	50	1.56	ND	103	73-125%	---	---	
1,2,4-Trimethylbenzene	1.59	0.0390	0.0780	mg/kg dry	50	1.56	0.0585	98	75-123%	---	---	
1,3,5-Trimethylbenzene	1.58	0.0390	0.0780	mg/kg dry	50	1.56	0.0405	99	73-124%	---	---	
Vinyl chloride	1.40	0.0195	0.0390	mg/kg dry	50	1.56	ND	90	56-135%	---	---	
m,p-Xylene	3.27	0.0390	0.0780	mg/kg dry	50	3.12	0.0468	103	77-124%	---	---	
o-Xylene	1.57	0.0195	0.0390	mg/kg dry	50	1.56	0.0678	96	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 87 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 14:51							
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 14:51							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 83 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 14:51							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
LCS (9071232-BS2)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 13:56							
5035A/8260C												
Acetone	1.90	0.500	1.00	mg/kg wet	50	2.00	---	95	80-120%	---	---	
Acrylonitrile	0.832	0.0500	0.100	mg/kg wet	50	1.00	---	83	80-120%	---	---	
Benzene	0.817	0.00500	0.0100	mg/kg wet	50	1.00	---	82	80-120%	---	---	
Bromobenzene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromochloromethane	0.843	0.0250	0.0500	mg/kg wet	50	1.00	---	84	80-120%	---	---	
Bromodichloromethane	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
Bromoform	1.35	0.0500	0.100	mg/kg wet	50	1.00	---	135	80-120%	---	---	Q-56
Bromomethane	1.01	0.500	0.500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
2-Butanone (MEK)	1.68	0.250	0.500	mg/kg wet	50	2.00	---	84	80-120%	---	---	
n-Butylbenzene	0.999	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
sec-Butylbenzene	0.969	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
tert-Butylbenzene	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Carbon disulfide	0.837	0.250	0.500	mg/kg wet	50	1.00	---	84	80-120%	---	---	
Carbon tetrachloride	1.16	0.0250	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Chlorobenzene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Chloroethane	1.07	0.250	0.500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
Chloroform	0.974	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Chloromethane	0.752	0.250	0.250	mg/kg wet	50	1.00	---	75	80-120%	---	---	Q-55
2-Chlorotoluene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
4-Chlorotoluene	0.982	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Dibromochloromethane	1.22	0.0500	0.100	mg/kg wet	50	1.00	---	122	80-120%	---	---	Q-56
1,2-Dibromo-3-chloropropane	0.946	0.125	0.250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Dibromomethane	0.909	0.0250	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,2-Dichlorobenzene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,3-Dichlorobenzene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,4-Dichlorobenzene	0.994	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Dichlorodifluoromethane	0.991	0.0500	0.100	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,1-Dichloroethane	0.886	0.0125	0.0250	mg/kg wet	50	1.00	---	89	80-120%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
LCS (9071232-BS2)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 13:56							
1,2-Dichloroethane (EDC)	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,1-Dichloroethene	0.961	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
cis-1,2-Dichloroethene	0.926	0.0125	0.0250	mg/kg wet	50	1.00	---	93	80-120%	---	---	
trans-1,2-Dichloroethene	0.908	0.0125	0.0250	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,2-Dichloropropane	0.824	0.0125	0.0250	mg/kg wet	50	1.00	---	82	80-120%	---	---	
1,3-Dichloropropane	1.05	0.0250	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
2,2-Dichloropropane	1.11	0.0250	0.0500	mg/kg wet	50	1.00	---	111	80-120%	---	---	
1,1-Dichloropropene	0.885	0.0250	0.0500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
cis-1,3-Dichloropropene	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
trans-1,3-Dichloropropene	1.16	0.0250	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Ethylbenzene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Hexachlorobutadiene	1.14	0.0500	0.100	mg/kg wet	50	1.00	---	114	80-120%	---	---	
2-Hexanone	1.86	0.250	0.500	mg/kg wet	50	2.00	---	93	80-120%	---	---	
Isopropylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
4-Isopropyltoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Methylene chloride	0.841	0.125	0.250	mg/kg wet	50	1.00	---	84	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.90	0.250	0.500	mg/kg wet	50	2.00	---	95	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.904	0.0250	0.0500	mg/kg wet	50	1.00	---	90	80-120%	---	---	
Naphthalene	1.01	0.0500	0.100	mg/kg wet	50	1.00	---	101	80-120%	---	---	
n-Propylbenzene	0.960	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Styrene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.17	0.0125	0.0250	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.862	0.0250	0.0500	mg/kg wet	50	1.00	---	86	80-120%	---	---	
Tetrachloroethene (PCE)	1.14	0.0125	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	
Toluene	0.972	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	1.01	0.125	0.250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,2,4-Trichlorobenzene	1.04	0.125	0.250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,1,1-Trichloroethane	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,1,2-Trichloroethane	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Trichloroethene (TCE)	0.960	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Trichlorofluoromethane	1.26	0.0500	0.100	mg/kg wet	50	1.00	---	126	80-120%	---	---	Q-56
1,2,3-Trichloropropane	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,2,4-Trimethylbenzene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,3,5-Trimethylbenzene	0.990	0.0250	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
LCS (9071232-BS2)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 13:56							
Vinyl chloride	0.884	0.0125	0.0250	mg/kg wet	50	1.00	---	88	80-120%	---	---	
m,p-Xylene	2.10	0.0250	0.0500	mg/kg wet	50	2.00	---	105	80-120%	---	---	
o-Xylene	0.983	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 86 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

Duplicate (9071232-DUP1)

Prepared: 07/19/19 10:35 Analyzed: 07/24/19 16:40

QC Source Sample: DP-10(6-7.5) (A9G0676-35)**5035A/8260C**

Acetone	ND	0.647	1.29	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00647	0.0129	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.647	0.647	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.324	0.324	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Duplicate (9071232-DUP1)			Prepared: 07/19/19 10:35		Analyzed: 07/24/19 16:40							
QC Source Sample: DP-10(6-7.5) (A9G0676-35)												
1,2-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0330	0.0330	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Duplicate (9071232-DUP1)			Prepared: 07/19/19 10:35 Analyzed: 07/24/19 16:40									
QC Source Sample: DP-10(6-7.5) (A9G0676-35)												
1,1,2-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0330	0.0330	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
Matrix Spike (9071232-MS1)						Prepared: 07/19/19 10:50 Analyzed: 07/24/19 17:35						
QC Source Sample: DP-11(6-7.5) (A9G0676-38)												
5035A/8260C												
Acetone	2.90	0.652	1.30	mg/kg dry	50	2.61	ND	111	36-164%	---	---	
Acrylonitrile	1.31	0.0652	0.130	mg/kg dry	50	1.30	ND	101	65-134%	---	---	
Benzene	1.19	0.00652	0.0130	mg/kg dry	50	1.30	ND	91	77-121%	---	---	
Bromobenzene	1.35	0.0163	0.0326	mg/kg dry	50	1.30	ND	103	78-121%	---	---	
Bromochloromethane	1.23	0.0326	0.0652	mg/kg dry	50	1.30	ND	94	78-125%	---	---	
Bromodichloromethane	1.41	0.0326	0.0652	mg/kg dry	50	1.30	ND	108	75-127%	---	---	
Bromoform	1.64	0.0652	0.130	mg/kg dry	50	1.30	ND	126	67-132%	---	---	Q-54e
Bromomethane	1.50	0.652	0.652	mg/kg dry	50	1.30	ND	115	53-143%	---	---	
2-Butanone (MEK)	2.46	0.326	0.652	mg/kg dry	50	2.61	ND	94	51-148%	---	---	
n-Butylbenzene	1.34	0.0326	0.0652	mg/kg dry	50	1.30	ND	103	70-128%	---	---	
sec-Butylbenzene	1.31	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	73-126%	---	---	
tert-Butylbenzene	1.28	0.0326	0.0652	mg/kg dry	50	1.30	ND	98	73-125%	---	---	
Carbon disulfide	1.27	0.326	0.652	mg/kg dry	50	1.30	ND	97	63-132%	---	---	
Carbon tetrachloride	1.40	0.0326	0.0652	mg/kg dry	50	1.30	ND	107	70-135%	---	---	
Chlorobenzene	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	79-120%	---	---	
Chloroethane	1.27	0.326	0.652	mg/kg dry	50	1.30	ND	98	59-139%	---	---	
Chloroform	1.34	0.0326	0.0652	mg/kg dry	50	1.30	ND	103	78-123%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Matrix Spike (9071232-MS1)			Prepared: 07/19/19 10:50		Analyzed: 07/24/19 17:35							
QC Source Sample: DP-11(6-7.5) (A9G0676-38)												
Chloromethane	1.10	0.326	0.326	mg/kg dry	50	1.30	ND	84	50-136%	---	---	Q-54x
2-Chlorotoluene	1.30	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	75-122%	---	---	
4-Chlorotoluene	1.23	0.0326	0.0652	mg/kg dry	50	1.30	ND	95	72-124%	---	---	
Dibromochloromethane	1.51	0.0652	0.130	mg/kg dry	50	1.30	ND	116	74-126%	---	---	Q-54g
1,2-Dibromo-3-chloropropane	1.25	0.163	0.326	mg/kg dry	50	1.30	ND	96	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.41	0.0326	0.0652	mg/kg dry	50	1.30	ND	108	78-122%	---	---	
Dibromomethane	1.26	0.0326	0.0652	mg/kg dry	50	1.30	ND	97	78-125%	---	---	
1,2-Dichlorobenzene	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	78-121%	---	---	
1,3-Dichlorobenzene	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	77-121%	---	---	
1,4-Dichlorobenzene	1.28	0.0163	0.0326	mg/kg dry	50	1.30	ND	98	75-120%	---	---	
Dichlorodifluoromethane	1.27	0.0652	0.130	mg/kg dry	50	1.30	ND	97	29-149%	---	---	
1,1-Dichloroethane	1.27	0.0163	0.0326	mg/kg dry	50	1.30	ND	97	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.28	0.0163	0.0326	mg/kg dry	50	1.30	ND	98	73-128%	---	---	
1,1-Dichloroethene	1.27	0.0163	0.0326	mg/kg dry	50	1.30	ND	97	70-131%	---	---	
cis-1,2-Dichloroethene	1.31	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	77-123%	---	---	
trans-1,2-Dichloroethene	1.29	0.0163	0.0326	mg/kg dry	50	1.30	ND	99	74-125%	---	---	
1,2-Dichloropropane	1.19	0.0163	0.0326	mg/kg dry	50	1.30	ND	91	76-123%	---	---	
1,3-Dichloropropane	1.34	0.0326	0.0652	mg/kg dry	50	1.30	ND	102	77-121%	---	---	
2,2-Dichloropropane	1.32	0.0326	0.0652	mg/kg dry	50	1.30	ND	101	67-133%	---	---	
1,1-Dichloropropene	1.24	0.0326	0.0652	mg/kg dry	50	1.30	ND	95	76-125%	---	---	
cis-1,3-Dichloropropene	1.35	0.0326	0.0652	mg/kg dry	50	1.30	ND	103	74-126%	---	---	
trans-1,3-Dichloropropene	1.40	0.0326	0.0652	mg/kg dry	50	1.30	ND	107	71-130%	---	---	
Ethylbenzene	1.29	0.0163	0.0326	mg/kg dry	50	1.30	ND	97	76-122%	---	---	
Hexachlorobutadiene	1.89	0.0652	0.130	mg/kg dry	50	1.30	ND	145	61-135%	---	---	Q-01
2-Hexanone	2.42	0.326	0.652	mg/kg dry	50	2.61	ND	93	53-145%	---	---	
Isopropylbenzene	1.31	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	68-134%	---	---	
4-Isopropyltoluene	1.31	0.0326	0.0652	mg/kg dry	50	1.30	ND	101	73-127%	---	---	
Methylene chloride	1.34	0.163	0.326	mg/kg dry	50	1.30	ND	103	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3.40	0.326	0.652	mg/kg dry	50	2.61	0.831	99	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.23	0.0326	0.0652	mg/kg dry	50	1.30	ND	94	73-125%	---	---	
Naphthalene	1.40	0.0652	0.130	mg/kg dry	50	1.30	ND	107	62-129%	---	---	
n-Propylbenzene	1.25	0.0163	0.0326	mg/kg dry	50	1.30	ND	96	73-125%	---	---	
Styrene	1.29	0.0326	0.0652	mg/kg drv	50	1.30	ND	99	76-124%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A							Soil					
Matrix Spike (9071232-MS1)			Prepared: 07/19/19 10:50 Analyzed: 07/24/19 17:35									
QC Source Sample: DP-11(6-7.5) (A9G0676-38)												
1,1,1,2-Tetrachloroethane	1.46	0.0163	0.0326	mg/kg dry	50	1.30	ND	112	78-125%	---	---	Q-54r
1,1,2,2-Tetrachloroethane	1.29	0.0717	0.0717	mg/kg dry	50	1.30	ND	99	70-124%	---	---	
Tetrachloroethene (PCE)	1.49	0.0163	0.0326	mg/kg dry	50	1.30	0.0978	107	73-128%	---	---	
Toluene	1.28	0.0326	0.0652	mg/kg dry	50	1.30	ND	98	77-121%	---	---	
1,2,3-Trichlorobenzene	1.38	0.163	0.326	mg/kg dry	50	1.30	ND	106	66-130%	---	---	
1,2,4-Trichlorobenzene	1.41	0.163	0.326	mg/kg dry	50	1.30	ND	108	67-129%	---	---	
1,1,1-Trichloroethane	1.31	0.0163	0.0326	mg/kg dry	50	1.30	ND	100	73-130%	---	---	
1,1,2-Trichloroethane	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	78-121%	---	---	
Trichloroethene (TCE)	1.34	0.0163	0.0326	mg/kg dry	50	1.30	ND	103	77-123%	---	---	
Trichlorofluoromethane	1.36	0.0652	0.130	mg/kg dry	50	1.30	ND	104	62-140%	---	---	
1,2,3-Trichloropropane	1.32	0.0326	0.0652	mg/kg dry	50	1.30	ND	101	73-125%	---	---	
1,2,4-Trimethylbenzene	1.30	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	75-123%	---	---	
1,3,5-Trimethylbenzene	1.29	0.0326	0.0652	mg/kg dry	50	1.30	ND	99	73-124%	---	---	
Vinyl chloride	1.28	0.0163	0.0326	mg/kg dry	50	1.30	ND	98	56-135%	---	---	
m,p-Xylene	2.59	0.0326	0.0652	mg/kg dry	50	2.61	ND	98	77-124%	---	---	
o-Xylene	1.25	0.0163	0.0326	mg/kg dry	50	1.30	0.0482	92	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Blank (9071347-BLK1)			Prepared: 08/02/19 08:00 Analyzed: 08/02/19 12:33									
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Blank (9071347-BLK1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 12:33							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	0.0560	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	B-02, J
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	0.0763	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	B
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	0.0237	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	B-02, J
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Blank (9071347-BLK1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 12:33							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
LCS (9071347-BS1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 11:39							A-01
5035A/8260C												
Acetone	1.61	0.500	1.00	mg/kg wet	50	2.00	---	81	80-120%	---	---	
Acrylonitrile	0.963	0.0500	0.100	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Benzene	1.00	0.00500	0.0100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromobenzene	0.976	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Bromodichloromethane	0.943	0.0250	0.0500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
Bromoform	0.906	0.0500	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Bromomethane	1.10	0.500	0.500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
2-Butanone (MEK)	1.96	0.250	0.500	mg/kg wet	50	2.00	---	98	80-120%	---	---	
n-Butylbenzene	1.04	0.250	0.250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
sec-Butylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
tert-Butylbenzene	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Carbon disulfide	0.854	0.250	0.500	mg/kg wet	50	1.00	---	85	80-120%	---	---	
Carbon tetrachloride	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chlorobenzene	0.992	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Chloroethane	1.04	0.250	0.500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloroform	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chloromethane	0.918	0.125	0.250	mg/kg wet	50	1.00	---	92	80-120%	---	---	
2-Chlorotoluene	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
4-Chlorotoluene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Dibromochloromethane	0.882	0.0500	0.100	mg/kg wet	50	1.00	---	88	80-120%	---	---	
1,2-Dibromo-3-chloropropane	1.01	0.125	0.250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.960	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Dibromomethane	0.924	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
1,2-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
1,4-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Dichlorodifluoromethane	1.13	0.0500	0.100	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,1-Dichloroethane	0.949	0.0125	0.0250	mg/kg wet	50	1.00	---	95	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
LCS (9071347-BS1)						Prepared: 08/02/19 08:00 Analyzed: 08/02/19 11:39					A-01	
1,2-Dichloroethane (EDC)	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,1-Dichloroethene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
cis-1,2-Dichloroethene	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2-Dichloropropane	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,3-Dichloropropane	0.956	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
2,2-Dichloropropane	1.13	0.0250	0.0500	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,1-Dichloropropene	1.10	0.0250	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
cis-1,3-Dichloropropene	0.961	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
trans-1,3-Dichloropropene	0.962	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Ethylbenzene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Hexachlorobutadiene	1.04	0.0500	0.100	mg/kg wet	50	1.00	---	104	80-120%	---	---	B-02
2-Hexanone	1.98	0.250	0.500	mg/kg wet	50	2.00	---	99	80-120%	---	---	
Isopropylbenzene	1.16	0.0250	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
4-Isopropyltoluene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Methylene chloride	0.948	0.125	0.250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.99	0.250	0.500	mg/kg wet	50	2.00	---	100	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Naphthalene	0.902	0.0500	0.100	mg/kg wet	50	1.00	---	90	80-120%	---	---	B
n-Propylbenzene	1.16	0.0125	0.0250	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Styrene	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,1,1,2-Tetrachloroethane	0.974	0.0125	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.908	0.0250	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Tetrachloroethene (PCE)	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Toluene	0.980	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	0.941	0.125	0.250	mg/kg wet	50	1.00	---	94	80-120%	---	---	
1,2,4-Trichlorobenzene	0.912	0.125	0.250	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,1,1-Trichloroethane	1.06	0.0125	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,1,2-Trichloroethane	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Trichloroethene (TCE)	1.06	0.0125	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Trichlorofluoromethane	1.04	0.0500	0.100	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,2,3-Trichloropropane	0.963	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	B-02
1,3,5-Trimethylbenzene	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
LCS (9071347-BS1)				Prepared: 08/02/19 08:00 Analyzed: 08/02/19 11:39								A-01
Vinyl chloride	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
m,p-Xylene	2.15	0.0250	0.0500	mg/kg wet	50	2.00	---	108	80-120%	---	---	
o-Xylene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>"</i>						

Duplicate (9071347-DUP1)

Prepared: 07/19/19 10:55 Analyzed: 08/02/19 15:53

QC Source Sample: DP-11(10-11.5) (A9G0676-39)**5035A/8260C**

Acetone	ND	0.555	1.11	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00555	0.0111	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.555	0.555	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.277	0.277	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Duplicate (9071347-DUP1)			Prepared: 07/19/19 10:55		Analyzed: 08/02/19 15:53							
QC Source Sample: DP-11(10-11.5) (A9G0676-39)												
1,2-Dichlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Duplicate (9071347-DUP1)			Prepared: 07/19/19 10:55 Analyzed: 08/02/19 15:53									
QC Source Sample: DP-11(10-11.5) (A9G0676-39)												
1,1,2-Trichloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	0.0150	0.0139	0.0277	mg/kg dry	50	---	0.0152	---	---	1	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Philip Nerenberg, Lab Director

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Blank (9080523-BLK1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 16:32							
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Blank (9080523-BLK1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 16:32							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	B-02, J
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	0.114	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Blank (9080523-BLK1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 16:32							
Surr: Toluene-d8 (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						
LCS (9080523-BS1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 15:38							
5035A/8260C												
Acetone	2.42	0.500	1.00	mg/kg wet	50	2.00	---	121	80-120%	---	---	Q-56
Acrylonitrile	1.24	0.0500	0.100	mg/kg wet	50	1.00	---	124	80-120%	---	---	Q-56
Benzene	1.08	0.00500	0.0100	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Bromobenzene	0.937	0.0125	0.0250	mg/kg wet	50	1.00	---	94	80-120%	---	---	
Bromochloromethane	1.24	0.0250	0.0500	mg/kg wet	50	1.00	---	124	80-120%	---	---	Q-56
Bromodichloromethane	1.14	0.0250	0.0500	mg/kg wet	50	1.00	---	114	80-120%	---	---	
Bromoform	0.997	0.0500	0.100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromomethane	2.19	0.500	0.500	mg/kg wet	50	1.00	---	219	80-120%	---	---	Q-56
2-Butanone (MEK)	2.46	0.250	0.500	mg/kg wet	50	2.00	---	123	80-120%	---	---	Q-56
n-Butylbenzene	0.955	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
sec-Butylbenzene	0.971	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
tert-Butylbenzene	0.977	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Carbon disulfide	1.25	0.250	0.500	mg/kg wet	50	1.00	---	125	80-120%	---	---	Q-56
Carbon tetrachloride	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Chlorobenzene	0.965	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Chloroethane	1.28	0.250	0.500	mg/kg wet	50	1.00	---	128	80-120%	---	---	Q-56
Chloroform	1.13	0.0250	0.0500	mg/kg wet	50	1.00	---	113	80-120%	---	---	
Chloromethane	0.978	0.125	0.250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
2-Chlorotoluene	0.920	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
4-Chlorotoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dibromochloromethane	0.910	0.0500	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.981	0.125	0.250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dibromomethane	1.21	0.0250	0.0500	mg/kg wet	50	1.00	---	121	80-120%	---	---	Q-56
1,2-Dichlorobenzene	0.993	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,3-Dichlorobenzene	0.994	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,4-Dichlorobenzene	0.950	0.0125	0.0250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Dichlorodifluoromethane	0.851	0.0500	0.100	mg/kg wet	50	1.00	---	85	80-120%	---	---	
1,1-Dichloroethane	1.14	0.0125	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
LCS (9080523-BS1)						Prepared: 08/01/19 12:00 Analyzed: 08/01/19 15:38						
1,2-Dichloroethane (EDC)	1.14	0.0125	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	
1,1-Dichloroethene	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
cis-1,2-Dichloroethene	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
trans-1,2-Dichloroethene	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,2-Dichloropropane	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
1,3-Dichloropropane	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
2,2-Dichloropropane	1.18	0.0250	0.0500	mg/kg wet	50	1.00	---	118	80-120%	---	---	
1,1-Dichloropropene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
cis-1,3-Dichloropropene	0.922	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
trans-1,3-Dichloropropene	1.05	0.0500	0.100	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Ethylbenzene	0.985	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Hexachlorobutadiene	0.808	0.0500	0.100	mg/kg wet	50	1.00	---	81	80-120%	---	---	
2-Hexanone	2.14	0.250	0.500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
Isopropylbenzene	0.916	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
4-Isopropyltoluene	0.892	0.0250	0.0500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Methylene chloride	1.20	0.125	0.250	mg/kg wet	50	1.00	---	120	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.25	0.250	0.500	mg/kg wet	50	2.00	---	112	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.983	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Naphthalene	0.807	0.0500	0.100	mg/kg wet	50	1.00	---	81	80-120%	---	---	
n-Propylbenzene	0.987	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Styrene	0.877	0.0250	0.0500	mg/kg wet	50	1.00	---	88	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Tetrachloroethene (PCE)	0.963	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Toluene	0.980	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	0.902	0.125	0.250	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2,4-Trichlorobenzene	0.793	0.250	0.250	mg/kg wet	50	1.00	---	79	80-120%	---	---	Q-55
1,1,1-Trichloroethane	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,1,2-Trichloroethane	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Trichloroethene (TCE)	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Trichlorofluoromethane	1.21	0.0500	0.100	mg/kg wet	50	1.00	---	121	80-120%	---	---	Q-56
1,2,3-Trichloropropane	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,3,5-Trimethylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
LCS (9080523-BS1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 15:38							
Vinyl chloride	1.47	0.0125	0.0250	mg/kg wet	50	1.00	---	147	80-120%	---	---	Q-56
m,p-Xylene	2.13	0.0250	0.0500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
o-Xylene	0.973	0.0125	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						

Duplicate (9080523-DUP1)

Prepared: 07/18/19 11:40 Analyzed: 08/01/19 17:26

QC Source Sample: DP-2(25-26.5) (A9G0676-09)**5035A/8260C**

Acetone	ND	0.707	1.41	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00707	0.0141	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.707	0.707	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.177	0.353	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.177	0.353	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP1)			Prepared: 07/18/19 11:40 Analyzed: 08/01/19 17:26									
QC Source Sample: DP-2(25-26.5) (A9G0676-09)												
1,2-Dichlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.360	0.360	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.177	0.353	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.353	0.353	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP1)			Prepared: 07/18/19 11:40 Analyzed: 08/01/19 17:26									
QC Source Sample: DP-2(25-26.5) (A9G0676-09)												
1,1,2-Trichloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						

Duplicate (9080523-DUP2)				Prepared: 07/31/19 18:15 Analyzed: 08/01/19 22:26								V-15
QC Source Sample: Non-SDG (A9G0983-03)												
Acetone	ND	0.740	1.48	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	0.00740	0.0148	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.740	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP2)			Prepared: 07/31/19 18:15		Analyzed: 08/01/19 22:26		V-15					
QC Source Sample: Non-SDG (A9G0983-03)												
2-Chlorotoluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP2)			Prepared: 07/31/19 18:15 Analyzed: 08/01/19 22:26						V-15			
QC Source Sample: Non-SDG (A9G0983-03)												
1,1,2,2-Tetrachloroethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.370	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0378	0.0378	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 108 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		95 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						

Matrix Spike (9080523-MS1)

Prepared: 07/24/19 15:45 Analyzed: 08/01/19 18:21

QC Source Sample: Non-SDG (A9G0777-02)**5035A/8260C**

Acetone	3.60	0.634	1.27	mg/kg dry	50	2.53	ND	142	36-164%	---	---	Q-54b
Acrylonitrile	1.79	0.0634	0.127	mg/kg dry	50	1.26	ND	142	65-134%	---	---	Q-54m
Benzene	1.46	0.00634	0.0127	mg/kg dry	50	1.26	ND	116	77-121%	---	---	
Bromobenzene	1.42	0.0158	0.0317	mg/kg dry	50	1.26	ND	113	78-121%	---	---	
Bromochloromethane	1.63	0.0317	0.0634	mg/kg dry	50	1.26	ND	129	78-125%	---	---	Q-54l
Bromodichloromethane	1.62	0.0317	0.0634	mg/kg dry	50	1.26	ND	128	75-127%	---	---	Q-01
Bromoform	1.22	0.0634	0.127	mg/kg dry	50	1.26	ND	97	67-132%	---	---	
Bromomethane	2.80	0.634	0.634	mg/kg dry	50	1.26	ND	222	53-143%	---	---	Q-54u
2-Butanone (MEK)	3.74	0.317	0.634	mg/kg dry	50	2.53	ND	148	51-148%	---	---	Q-54k
n-Butylbenzene	2.10	0.0317	0.0634	mg/kg dry	50	1.26	0.395	135	70-128%	---	---	Q-01
sec-Butylbenzene	1.72	0.0317	0.0634	mg/kg dry	50	1.26	0.174	122	73-126%	---	---	

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Matrix Spike (9080523-MS1)			Prepared: 07/24/19 15:45		Analyzed: 08/01/19 18:21							
QC Source Sample: Non-SDG (A9G0777-02)												
tert-Butylbenzene	1.58	0.0317	0.0634	mg/kg dry	50	1.26	ND	125	73-125%	---	---	Q-54p
Carbon disulfide	1.59	0.317	0.634	mg/kg dry	50	1.26	ND	126	63-132%	---	---	
Carbon tetrachloride	1.35	0.0317	0.0634	mg/kg dry	50	1.26	ND	107	70-135%	---	---	
Chlorobenzene	1.24	0.0158	0.0317	mg/kg dry	50	1.26	ND	98	79-120%	---	---	Q-54t
Chloroethane	1.53	0.317	0.634	mg/kg dry	50	1.26	ND	121	59-139%	---	---	
Chloroform	1.54	0.0317	0.0634	mg/kg dry	50	1.26	ND	121	78-123%	---	---	
Chloromethane	1.29	0.158	0.317	mg/kg dry	50	1.26	ND	102	50-136%	---	---	Q-54r
2-Chlorotoluene	1.43	0.0317	0.0634	mg/kg dry	50	1.26	ND	113	75-122%	---	---	
4-Chlorotoluene	1.46	0.0317	0.0634	mg/kg dry	50	1.26	ND	115	72-124%	---	---	
Dibromochloromethane	1.19	0.0634	0.127	mg/kg dry	50	1.26	ND	94	74-126%	---	---	Q-54s
1,2-Dibromo-3-chloropropane	1.41	0.158	0.317	mg/kg dry	50	1.26	ND	111	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.34	0.0317	0.0634	mg/kg dry	50	1.26	ND	106	78-122%	---	---	
Dibromomethane	1.76	0.0317	0.0634	mg/kg dry	50	1.26	ND	139	78-125%	---	---	Q-54q
1,2-Dichlorobenzene	1.33	0.0158	0.0317	mg/kg dry	50	1.26	ND	105	78-121%	---	---	
1,3-Dichlorobenzene	1.36	0.0158	0.0317	mg/kg dry	50	1.26	ND	107	77-121%	---	---	
1,4-Dichlorobenzene	1.26	0.0158	0.0317	mg/kg dry	50	1.26	ND	100	75-120%	---	---	Q-54u
Dichlorodifluoromethane	1.18	0.0634	0.127	mg/kg dry	50	1.26	ND	93	29-149%	---	---	
1,1-Dichloroethane	1.45	0.0158	0.0317	mg/kg dry	50	1.26	ND	115	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.61	0.0158	0.0317	mg/kg dry	50	1.26	ND	128	73-128%	---	---	Q-54v
1,1-Dichloroethene	1.40	0.0158	0.0317	mg/kg dry	50	1.26	ND	111	70-131%	---	---	
cis-1,2-Dichloroethene	1.48	0.0158	0.0317	mg/kg dry	50	1.26	ND	117	77-123%	---	---	
trans-1,2-Dichloroethene	1.38	0.0158	0.0317	mg/kg dry	50	1.26	ND	109	74-125%	---	---	Q-54w
1,2-Dichloropropane	1.53	0.0158	0.0317	mg/kg dry	50	1.26	ND	121	76-123%	---	---	
1,3-Dichloropropane	1.35	0.0317	0.0634	mg/kg dry	50	1.26	ND	107	77-121%	---	---	
2,2-Dichloropropane	1.54	0.0317	0.0634	mg/kg dry	50	1.26	ND	122	67-133%	---	---	Q-54x
1,1-Dichloropropene	1.41	0.0317	0.0634	mg/kg dry	50	1.26	ND	111	76-125%	---	---	
cis-1,3-Dichloropropene	1.25	0.0317	0.0634	mg/kg dry	50	1.26	ND	99	74-126%	---	---	
trans-1,3-Dichloropropene	1.35	0.0634	0.127	mg/kg dry	50	1.26	ND	107	71-130%	---	---	Q-54y
Ethylbenzene	1.41	0.0158	0.0317	mg/kg dry	50	1.26	0.145	100	76-122%	---	---	
Hexachlorobutadiene	1.81	0.0634	0.127	mg/kg dry	50	1.26	ND	143	61-135%	---	---	
2-Hexanone	2.73	0.317	0.634	mg/kg dry	50	2.53	ND	108	53-145%	---	---	Q-54z
Isopropylbenzene	1.42	0.0317	0.0634	mg/kg dry	50	1.26	0.0673	107	68-134%	---	---	
4-Isopropyltoluene	1.65	0.0317	0.0634	mg/kg drv	50	1.26	0.140	120	73-127%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Matrix Spike (9080523-MS1)			Prepared: 07/24/19 15:45		Analyzed: 08/01/19 18:21							
QC Source Sample: Non-SDG (A9G0777-02)												
Methylene chloride	1.67	0.158	0.317	mg/kg dry	50	1.26	ND	106	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2.83	0.317	0.634	mg/kg dry	50	2.53	ND	112	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.48	0.0317	0.0634	mg/kg dry	50	1.26	ND	117	73-125%	---	---	
Naphthalene	1.67	0.0634	0.127	mg/kg dry	50	1.26	0.231	114	62-129%	---	---	
n-Propylbenzene	1.81	0.0158	0.0317	mg/kg dry	50	1.26	0.291	120	73-125%	---	---	
Styrene	1.24	0.0317	0.0634	mg/kg dry	50	1.26	ND	98	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.32	0.0158	0.0317	mg/kg dry	50	1.26	ND	105	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1.30	0.0317	0.0634	mg/kg dry	50	1.26	ND	100	70-124%	---	---	
Tetrachloroethene (PCE)	1.12	0.0158	0.0317	mg/kg dry	50	1.26	ND	89	73-128%	---	---	
Toluene	1.18	0.0317	0.0634	mg/kg dry	50	1.26	0.0509	90	77-121%	---	---	
1,2,3-Trichlorobenzene	1.37	0.158	0.317	mg/kg dry	50	1.26	ND	108	66-130%	---	---	
1,2,4-Trichlorobenzene	1.42	0.317	0.317	mg/kg dry	50	1.26	ND	112	67-129%	---	---	Q-54v
1,1,1-Trichloroethane	1.47	0.0158	0.0317	mg/kg dry	50	1.26	ND	116	73-130%	---	---	
1,1,2-Trichloroethane	1.44	0.0158	0.0317	mg/kg dry	50	1.26	ND	114	78-121%	---	---	
Trichloroethene (TCE)	1.44	0.0158	0.0317	mg/kg dry	50	1.26	ND	114	77-123%	---	---	
Trichlorofluoromethane	1.43	0.0634	0.127	mg/kg dry	50	1.26	ND	113	62-140%	---	---	Q-54a
1,2,3-Trichloropropane	1.38	0.0317	0.0634	mg/kg dry	50	1.26	ND	102	73-125%	---	---	
1,2,4-Trimethylbenzene	3.19	0.0317	0.0634	mg/kg dry	50	1.26	1.65	122	75-123%	---	---	
1,3,5-Trimethylbenzene	2.02	0.0317	0.0634	mg/kg dry	50	1.26	0.440	125	73-124%	---	---	Q-01
Vinyl chloride	1.91	0.0158	0.0317	mg/kg dry	50	1.26	ND	151	56-135%	---	---	Q-54j
m,p-Xylene	3.33	0.0317	0.0634	mg/kg dry	50	2.53	0.484	113	77-124%	---	---	
o-Xylene	1.89	0.0158	0.0317	mg/kg dry	50	1.26	0.373	120	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		107 %		Limits:		80-120 %		Dilution: 1x		
Toluene-d8 (Surr)				89 %				80-120 %		"		
4-Bromofluorobenzene (Surr)				104 %				80-120 %		"		

Apex Laboratories

Philip Nerenberg, Lab Director

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00 Analyzed: 08/02/19 13:12									
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 13:12							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0667	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 13:12							
Surr: Toluene-d8 (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						
LCS (9080584-BS1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 12:18							
5035A/8260C												
Acetone	2.32	0.500	1.00	mg/kg wet	50	2.00	---	116	80-120%	---	---	
Acrylonitrile	1.18	0.0500	0.100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Benzene	1.12	0.00500	0.0100	mg/kg wet	50	1.00	---	112	80-120%	---	---	
Bromobenzene	0.984	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	1.26	0.0250	0.0500	mg/kg wet	50	1.00	---	126	80-120%	---	---	Q-56
Bromodichloromethane	1.14	0.0250	0.0500	mg/kg wet	50	1.00	---	114	80-120%	---	---	
Bromoform	0.997	0.0500	0.100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromomethane	2.24	0.500	0.500	mg/kg wet	50	1.00	---	224	80-120%	---	---	Q-56
2-Butanone (MEK)	2.25	0.250	0.500	mg/kg wet	50	2.00	---	113	80-120%	---	---	
n-Butylbenzene	0.995	0.0250	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
sec-Butylbenzene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
tert-Butylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Carbon disulfide	1.31	0.250	0.500	mg/kg wet	50	1.00	---	131	80-120%	---	---	Q-56
Carbon tetrachloride	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Chlorobenzene	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chloroethane	1.20	0.250	0.500	mg/kg wet	50	1.00	---	120	80-120%	---	---	
Chloroform	1.17	0.0250	0.0500	mg/kg wet	50	1.00	---	117	80-120%	---	---	
Chloromethane	0.999	0.125	0.250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
2-Chlorotoluene	0.973	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
4-Chlorotoluene	1.09	0.0250	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
Dibromochloromethane	0.903	0.0500	0.100	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.903	0.125	0.250	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.997	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Dibromomethane	1.22	0.0250	0.0500	mg/kg wet	50	1.00	---	122	80-120%	---	---	Q-56
1,2-Dichlorobenzene	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,3-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,4-Dichlorobenzene	0.990	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Dichlorodifluoromethane	0.906	0.0500	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,1-Dichloroethane	1.13	0.0125	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
LCS (9080584-BS1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 12:18							
1,2-Dichloroethane (EDC)	1.15	0.0125	0.0250	mg/kg wet	50	1.00	---	115	80-120%	---	---	
1,1-Dichloroethene	1.15	0.0125	0.0250	mg/kg wet	50	1.00	---	115	80-120%	---	---	
cis-1,2-Dichloroethene	1.13	0.0125	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	
trans-1,2-Dichloroethene	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,2-Dichloropropane	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,3-Dichloropropane	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
2,2-Dichloropropane	1.28	0.0250	0.0500	mg/kg wet	50	1.00	---	128	80-120%	---	---	Q-56
1,1-Dichloropropene	1.09	0.0250	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
cis-1,3-Dichloropropene	0.955	0.0250	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
trans-1,3-Dichloropropene	1.08	0.0500	0.100	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Ethylbenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Hexachlorobutadiene	0.851	0.0500	0.100	mg/kg wet	50	1.00	---	85	80-120%	---	---	
2-Hexanone	2.06	0.250	0.500	mg/kg wet	50	2.00	---	103	80-120%	---	---	
Isopropylbenzene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
4-Isopropyltoluene	0.950	0.0250	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Methylene chloride	1.19	0.125	0.250	mg/kg wet	50	1.00	---	119	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.14	0.250	0.500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Naphthalene	0.747	0.100	0.100	mg/kg wet	50	1.00	---	75	80-120%	---	---	Q-55
n-Propylbenzene	1.06	0.0125	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Styrene	0.944	0.0250	0.0500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.07	0.0125	0.0250	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Tetrachloroethene (PCE)	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Toluene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	0.876	0.125	0.250	mg/kg wet	50	1.00	---	88	80-120%	---	---	
1,2,4-Trichlorobenzene	0.778	0.250	0.250	mg/kg wet	50	1.00	---	78	80-120%	---	---	Q-55
1,1,1-Trichloroethane	1.17	0.0125	0.0250	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,1,2-Trichloroethane	1.11	0.0125	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
Trichloroethene (TCE)	1.11	0.0125	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
Trichlorofluoromethane	1.17	0.0500	0.100	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,2,3-Trichloropropane	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	1.05	0.0250	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,3,5-Trimethylbenzene	1.11	0.0250	0.0500	mg/kg wet	50	1.00	---	111	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
LCS (9080584-BS1)				Prepared: 08/02/19 11:00 Analyzed: 08/02/19 12:18								
Vinyl chloride	1.60	0.0125	0.0250	mg/kg wet	50	1.00	---	160	80-120%	---	---	Q-56
m,p-Xylene	2.32	0.0250	0.0500	mg/kg wet	50	2.00	---	116	80-120%	---	---	
o-Xylene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						
Duplicate (9080584-DUP1)				Prepared: 07/31/19 18:15 Analyzed: 08/02/19 17:29								V-15
QC Source Sample: Non-SDG (A9G0983-05RE1)												
Acetone	ND	18.8	37.6	mg/kg wet	2000	---	ND	---	---	---	30%	
Acrylonitrile	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
Benzene	ND	0.188	0.376	mg/kg wet	2000	---	ND	---	---	---	30%	
Bromobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Bromoform	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
Bromomethane	ND	18.8	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
n-Butylbenzene	1.98	0.940	1.88	mg/kg wet	2000	---	1.90	---	---	4	30%	
sec-Butylbenzene	2.26	0.940	1.88	mg/kg wet	2000	---	2.16	---	---	4	30%	
tert-Butylbenzene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Carbon disulfide	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Chloroethane	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
Chloroform	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Chloromethane	ND	4.70	9.40	mg/kg wet	2000	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Dibromochloromethane	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	4.70	9.40	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Dibromomethane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Duplicate (9080584-DUP1)			Prepared: 07/31/19 18:15		Analyzed: 08/02/19 17:29							V-15
QC Source Sample: Non-SDG (A9G0983-05RE1)												
1,3-Dichlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
Ethylbenzene	1.66	0.470	0.940	mg/kg wet	2000	---	1.56	---	---	6	30%	
Hexachlorobutadiene	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
2-Hexanone	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
Isopropylbenzene	2.78	0.940	1.88	mg/kg wet	2000	---	2.56	---	---	8	30%	
4-Isopropyltoluene	2.18	0.940	1.88	mg/kg wet	2000	---	2.04	---	---	7	30%	
Methylene chloride	ND	11.5	11.5	mg/kg wet	2000	---	ND	---	---	---	30%	A-01a
4-Methyl-2-pentanone (MiBK)	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Naphthalene	ND	3.76	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
n-Propylbenzene	4.51	0.470	0.940	mg/kg wet	2000	---	4.28	---	---	5	30%	
Styrene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	5.64	5.64	mg/kg wet	2000	---	ND	---	---	---	30%	R-02
Tetrachloroethene (PCE)	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Toluene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	4.70	9.40	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	9.40	9.40	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Duplicate (9080584-DUP1)			Prepared: 07/31/19 18:15 Analyzed: 08/02/19 17:29						V-15			
QC Source Sample: Non-SDG (A9G0983-05RE1)												
Trichloroethene (TCE)	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
o-Xylene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		93 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
Matrix Spike (9080584-MS1)			Prepared: 07/19/19 11:40 Analyzed: 08/02/19 20:39									
QC Source Sample: DP-13(10-11.5) (A9G0676-47)												
5035A/8260C												
Acetone	3.73	0.677	1.35	mg/kg dry	50	2.71	ND	138	36-164%	---	---	
Acrylonitrile	1.75	0.0677	0.135	mg/kg dry	50	1.35	ND	129	65-134%	---	---	
Benzene	1.52	0.00677	0.0135	mg/kg dry	50	1.35	ND	112	77-121%	---	---	
Bromobenzene	1.28	0.0169	0.0338	mg/kg dry	50	1.35	ND	94	78-121%	---	---	
Bromochloromethane	1.80	0.0338	0.0677	mg/kg dry	50	1.35	ND	133	78-125%	---	---	Q-54q
Bromodichloromethane	1.63	0.0338	0.0677	mg/kg dry	50	1.35	ND	120	75-127%	---	---	
Bromoform	1.33	0.0677	0.135	mg/kg dry	50	1.35	ND	98	67-132%	---	---	
Bromomethane	3.29	0.677	0.677	mg/kg dry	50	1.35	ND	243	53-143%	---	---	Q-54c
2-Butanone (MEK)	3.59	0.338	0.677	mg/kg dry	50	2.71	ND	133	51-148%	---	---	
n-Butylbenzene	1.19	0.0338	0.0677	mg/kg dry	50	1.35	ND	88	70-128%	---	---	
sec-Butylbenzene	1.28	0.0338	0.0677	mg/kg dry	50	1.35	ND	95	73-126%	---	---	
tert-Butylbenzene	1.28	0.0338	0.0677	mg/kg dry	50	1.35	ND	95	73-125%	---	---	
Carbon disulfide	1.73	0.338	0.677	mg/kg dry	50	1.35	ND	128	63-132%	---	---	Q-54d
Carbon tetrachloride	1.50	0.0338	0.0677	mg/kg dry	50	1.35	ND	111	70-135%	---	---	
Chlorobenzene	1.31	0.0169	0.0338	mg/kg dry	50	1.35	ND	97	79-120%	---	---	
Chloroethane	2.13	0.338	0.677	mg/kg dry	50	1.35	ND	157	59-139%	---	---	Q-01
Chloroform	1.62	0.0338	0.0677	mg/kg dry	50	1.35	ND	120	78-123%	---	---	
Chloromethane	1.45	0.169	0.338	mg/kg dry	50	1.35	ND	107	50-136%	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Matrix Spike (9080584-MS1)			Prepared: 07/19/19 11:40		Analyzed: 08/02/19 20:39							
QC Source Sample: DP-13(10-11.5) (A9G0676-47)												
2-Chlorotoluene	1.23	0.0338	0.0677	mg/kg dry	50	1.35	ND	91	75-122%	---	---	
4-Chlorotoluene	1.37	0.0338	0.0677	mg/kg dry	50	1.35	ND	101	72-124%	---	---	
Dibromochloromethane	1.24	0.0677	0.135	mg/kg dry	50	1.35	ND	91	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1.30	0.169	0.338	mg/kg dry	50	1.35	ND	96	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.34	0.0338	0.0677	mg/kg dry	50	1.35	ND	99	78-122%	---	---	
Dibromomethane	1.73	0.0338	0.0677	mg/kg dry	50	1.35	ND	128	78-125%	---	---	Q-54f
1,2-Dichlorobenzene	1.35	0.0169	0.0338	mg/kg dry	50	1.35	ND	100	78-121%	---	---	
1,3-Dichlorobenzene	1.35	0.0169	0.0338	mg/kg dry	50	1.35	ND	100	77-121%	---	---	
1,4-Dichlorobenzene	1.27	0.0169	0.0338	mg/kg dry	50	1.35	ND	94	75-120%	---	---	
Dichlorodifluoromethane	1.22	0.0677	0.135	mg/kg dry	50	1.35	ND	90	29-149%	---	---	
1,1-Dichloroethane	1.67	0.0169	0.0338	mg/kg dry	50	1.35	ND	123	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.63	0.0169	0.0338	mg/kg dry	50	1.35	ND	121	73-128%	---	---	
1,1-Dichloroethene	1.52	0.0169	0.0338	mg/kg dry	50	1.35	ND	112	70-131%	---	---	
cis-1,2-Dichloroethene	1.53	0.0169	0.0338	mg/kg dry	50	1.35	ND	113	77-123%	---	---	
trans-1,2-Dichloroethene	1.47	0.0169	0.0338	mg/kg dry	50	1.35	ND	109	74-125%	---	---	
1,2-Dichloropropane	1.53	0.0169	0.0338	mg/kg dry	50	1.35	ND	113	76-123%	---	---	
1,3-Dichloropropane	1.38	0.0338	0.0677	mg/kg dry	50	1.35	ND	102	77-121%	---	---	
2,2-Dichloropropane	1.44	0.0338	0.0677	mg/kg dry	50	1.35	ND	107	67-133%	---	---	Q-54s
1,1-Dichloropropene	1.42	0.0338	0.0677	mg/kg dry	50	1.35	ND	105	76-125%	---	---	
cis-1,3-Dichloropropene	1.19	0.0338	0.0677	mg/kg dry	50	1.35	ND	88	74-126%	---	---	
trans-1,3-Dichloropropene	1.38	0.0677	0.135	mg/kg dry	50	1.35	ND	102	71-130%	---	---	
Ethylbenzene	1.35	0.0169	0.0338	mg/kg dry	50	1.35	ND	100	76-122%	---	---	
Hexachlorobutadiene	1.02	0.0677	0.135	mg/kg dry	50	1.35	ND	76	61-135%	---	---	
2-Hexanone	2.92	0.338	0.677	mg/kg dry	50	2.71	ND	108	53-145%	---	---	
Isopropylbenzene	1.20	0.0338	0.0677	mg/kg dry	50	1.35	ND	89	68-134%	---	---	
4-Isopropyltoluene	1.15	0.0338	0.0677	mg/kg dry	50	1.35	ND	85	73-127%	---	---	
Methylene chloride	1.80	0.169	0.338	mg/kg dry	50	1.35	ND	112	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3.06	0.338	0.677	mg/kg dry	50	2.71	ND	113	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.39	0.0338	0.0677	mg/kg dry	50	1.35	ND	103	73-125%	---	---	
Naphthalene	0.986	0.135	0.135	mg/kg dry	50	1.35	ND	73	62-129%	---	---	Q-54y
n-Propylbenzene	1.33	0.0169	0.0338	mg/kg dry	50	1.35	ND	98	73-125%	---	---	
Styrene	1.17	0.0338	0.0677	mg/kg dry	50	1.35	ND	86	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.40	0.0169	0.0338	mg/kg dry	50	1.35	ND	103	78-125%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Matrix Spike (9080584-MS1)			Prepared: 07/19/19 11:40		Analyzed: 08/02/19 20:39							
QC Source Sample: DP-13(10-11.5) (A9G0676-47)												
1,1,2,2-Tetrachloroethane	1.49	0.0338	0.0677	mg/kg dry	50	1.35	ND	110	70-124%	---	---	
Tetrachloroethene (PCE)	1.30	0.0169	0.0338	mg/kg dry	50	1.35	ND	96	73-128%	---	---	
Toluene	1.32	0.0338	0.0677	mg/kg dry	50	1.35	ND	97	77-121%	---	---	
1,2,3-Trichlorobenzene	1.13	0.169	0.338	mg/kg dry	50	1.35	ND	84	66-130%	---	---	
1,2,4-Trichlorobenzene	0.958	0.338	0.338	mg/kg dry	50	1.35	ND	71	67-129%	---	---	Q-54w
1,1,1-Trichloroethane	1.61	0.0169	0.0338	mg/kg dry	50	1.35	ND	119	73-130%	---	---	
1,1,2-Trichloroethane	1.47	0.0169	0.0338	mg/kg dry	50	1.35	ND	109	78-121%	---	---	
Trichloroethene (TCE)	1.44	0.0169	0.0338	mg/kg dry	50	1.35	ND	106	77-123%	---	---	
Trichlorofluoromethane	1.85	0.0677	0.135	mg/kg dry	50	1.35	ND	137	62-140%	---	---	
1,2,3-Trichloropropane	1.47	0.0338	0.0677	mg/kg dry	50	1.35	ND	108	73-125%	---	---	
1,2,4-Trimethylbenzene	1.35	0.0338	0.0677	mg/kg dry	50	1.35	ND	100	75-123%	---	---	
1,3,5-Trimethylbenzene	1.42	0.0338	0.0677	mg/kg dry	50	1.35	ND	105	73-124%	---	---	
Vinyl chloride	2.14	0.0169	0.0338	mg/kg dry	50	1.35	ND	158	56-135%	---	---	Q-54o
m,p-Xylene	2.94	0.0338	0.0677	mg/kg dry	50	2.71	ND	108	77-124%	---	---	
o-Xylene	1.27	0.0169	0.0338	mg/kg dry	50	1.35	ND	94	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		91 %		80-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071261 - EPA 3546						Soil						
Blank (9071261-BLK1)			Prepared: 07/25/19 07:05 Analyzed: 07/26/19 08:57									C-07
EPA 8082A												
Aroclor 1016	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 100 %		Limits: 60-125 %		Dilution: 1x						
LCS (9071261-BS1)			Prepared: 07/25/19 07:05 Analyzed: 07/26/19 09:14									C-07
EPA 8082A												
Aroclor 1016	0.150	0.00500	0.0100	mg/kg wet	1	0.250	---	60	47-134%	---	---	
Aroclor 1260	0.182	0.00500	0.0100	mg/kg wet	1	0.250	---	73	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 98 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (9071261-DUP1)			Prepared: 07/25/19 07:05 Analyzed: 07/26/19 10:07									C-07
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
EPA 8082A												
Aroclor 1016	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 94 %		Limits: 60-125 %		Dilution: 1x						
Matrix Spike (9071261-MS1)			Prepared: 07/25/19 07:05 Analyzed: 07/29/19 09:57									C-07
QC Source Sample: Non-SDG (A9G0705-02)												
EPA 8082A												
Aroclor 1016	0.188	0.00664	0.0133	mg/kg dry	1	0.332	ND	57	47-134%	---	---	
Aroclor 1260	0.230	0.00664	0.0133	mg/kg dry	1	0.332	ND	69	53-140%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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 9071261 - EPA 3546							Soil					
Matrix Spike (9071261-MS1)			Prepared: 07/25/19 07:05 Analyzed: 07/29/19 09:57									C-07
<u>QC Source Sample: Non-SDG (A9G0705-02)</u>												
Surr: Decachlorobiphenyl (Surr)				Recovery: 86 %		Limits: 60-125 %		Dilution: 1x				

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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 9081235 - EPA 3546												
Soil												
Blank (9081235-BLK1)												
Prepared: 08/22/19 06:48 Analyzed: 08/22/19 12:32												
EPA 8082A												
Aroclor 1016	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr) Recovery: 100 % Limits: 60-125 % Dilution: 1x												
LCS (9081235-BS1)												
Prepared: 08/22/19 06:48 Analyzed: 08/22/19 12:50												
EPA 8082A												
Aroclor 1016	0.184	0.00200	0.00400	mg/kg wet	1	0.250	---	74	47-134%	---	---	
Aroclor 1260	0.215	0.00200	0.00400	mg/kg wet	1	0.250	---	86	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr) Recovery: 102 % Limits: 60-125 % Dilution: 1x												
Duplicate (9081235-DUP1)												
Prepared: 08/22/19 06:48 Analyzed: 08/22/19 13:45												
QC Source Sample: DP-11(10-11.5) (A9G0676-39)												
EPA 8082A												
Aroclor 1016	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr) Recovery: 97 % Limits: 60-125 % Dilution: 1x												
Duplicate (9081235-DUP2)												
Prepared: 08/22/19 13:04 Analyzed: 08/23/19 08:43												
QC Source Sample: Non-SDG (A9H0254-01RE1)												
Aroclor 1016	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9081235 - EPA 3546						Soil						
Duplicate (9081235-DUP2)			Prepared: 08/22/19 13:04 Analyzed: 08/23/19 08:43					C-07				
QC Source Sample: Non-SDG (A9H0254-01RE1)												
Aroclor 1242	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	P-10 J
Aroclor 1248	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1254	0.0127	0.00458	0.00917	mg/kg wet	1	---	0.0150	---	---	17	30%	
Aroclor 1260	0.00527	0.00458	0.00917	mg/kg wet	1	---	0.00649	---	---	21	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 94 %		Limits: 60-125 %		Dilution: 1x						
Matrix Spike (9081235-MS1)			Prepared: 08/22/19 06:48 Analyzed: 08/22/19 15:35					C-07				
QC Source Sample: Non-SDG (A9H0684-06)												
EPA 8082A												
Aroclor 1016	0.176	0.00551	0.0110	mg/kg dry	1	0.276	ND	64	47-134%	---	---	
Aroclor 1260	0.209	0.00551	0.0110	mg/kg dry	1	0.276	ND	76	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 86 %		Limits: 60-125 %		Dilution: 1x						

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071207 - EPA 3546						Soil						
Blank (9071207-BLK1)			Prepared: 07/24/19 07:01 Analyzed: 07/24/19 16:59									
EPA 8270D (SIM)												
Acenaphthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 81 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		105 %		54-127 %		"						

LCS (9071207-BS1)

Prepared: 07/24/19 07:01 Analyzed: 07/24/19 17:25

EPA 8270D (SIM)												
Acenaphthene	0.618	0.00500	0.0100	mg/kg wet	1	0.800	---	77	40-122%	---	---	
Acenaphthylene	0.604	0.00500	0.0100	mg/kg wet	1	0.800	---	76	32-132%	---	---	
Anthracene	0.668	0.00500	0.0100	mg/kg wet	1	0.800	---	83	47-123%	---	---	
Benz(a)anthracene	0.642	0.00500	0.0100	mg/kg wet	1	0.800	---	80	49-126%	---	---	
Benzo(a)pyrene	0.793	0.00500	0.0100	mg/kg wet	1	0.800	---	99	45-129%	---	---	
Benzo(b)fluoranthene	0.777	0.00500	0.0100	mg/kg wet	1	0.800	---	97	45-132%	---	---	
Benzo(k)fluoranthene	0.746	0.00500	0.0100	mg/kg wet	1	0.800	---	93	47-132%	---	---	
Benzo(g,h,i)perylene	0.579	0.00500	0.0100	mg/kg wet	1	0.800	---	72	43-134%	---	---	
Chrysene	0.701	0.00500	0.0100	mg/kg wet	1	0.800	---	88	50-124%	---	---	

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Philip Nerenberg, Lab Director

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EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071207 - EPA 3546						Soil						
LCS (9071207-BS1)			Prepared: 07/24/19 07:01		Analyzed: 07/24/19 17:25							
Dibenz(a,h)anthracene	0.650	0.00500	0.0100	mg/kg wet	1	0.800	---	81	45-134%	---	---	
Dibenzofuran	0.643	0.00500	0.0100	mg/kg wet	1	0.800	---	80	44-120%	---	---	
Fluoranthene	0.680	0.00500	0.0100	mg/kg wet	1	0.800	---	85	50-127%	---	---	
Fluorene	0.644	0.00500	0.0100	mg/kg wet	1	0.800	---	81	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.607	0.00500	0.0100	mg/kg wet	1	0.800	---	76	45-133%	---	---	
1-Methylnaphthalene	0.639	0.00500	0.0100	mg/kg wet	1	0.800	---	80	40-120%	---	---	
2-Methylnaphthalene	0.629	0.00500	0.0100	mg/kg wet	1	0.800	---	79	38-122%	---	---	
Naphthalene	0.593	0.00500	0.0100	mg/kg wet	1	0.800	---	74	35-123%	---	---	
Phenanthrene	0.633	0.00500	0.0100	mg/kg wet	1	0.800	---	79	50-121%	---	---	
Pyrene	0.664	0.00500	0.0100	mg/kg wet	1	0.800	---	83	47-127%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 82 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		96 %		54-127 %		"						
Duplicate (9071207-DUP1)			Prepared: 07/24/19 07:01		Analyzed: 07/24/19 18:15							
QC Source Sample: Non-SDG (A9G0384-01)												
Acenaphthene	ND	0.879	0.879	mg/kg dry	5	---	ND	---	---	---	30%	R-02
Acenaphthylene	ND	0.261	0.261	mg/kg dry	5	---	ND	---	---	---	30%	R-02
Anthracene	ND	0.295	0.295	mg/kg dry	5	---	ND	---	---	---	30%	R-02
Benz(a)anthracene	ND	0.0687	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Chrysene	ND	0.0687	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Dibenzofuran	1.19	0.0343	0.0687	mg/kg dry	5	---	1.14	---	---	4	30%	
Fluoranthene	0.0880	0.0343	0.0687	mg/kg dry	5	---	0.0860	---	---	2	30%	
Fluorene	2.18	0.0343	0.0687	mg/kg dry	5	---	2.05	---	---	6	30%	
Indeno(1,2,3-cd)pyrene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
1-Methylnaphthalene	8.26	0.0343	0.0687	mg/kg dry	5	---	7.94	---	---	4	30%	
2-Methylnaphthalene	6.18	0.0343	0.0687	mg/kg dry	5	---	5.88	---	---	5	30%	
Naphthalene	2.44	0.0343	0.0687	mg/kg dry	5	---	2.36	---	---	3	30%	
Phenanthrene	4.36	0.0343	0.0687	mg/kg dry	5	---	4.04	---	---	8	30%	
Pyrene	0.278	0.0343	0.0687	mg/kg dry	5	---	0.259	---	---	7	30%	

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071207 - EPA 3546						Soil						
Duplicate (9071207-DUP1)			Prepared: 07/24/19 07:01 Analyzed: 07/24/19 18:15									
QC Source Sample: Non-SDG (A9G0384-01)												
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 84 %		Limits: 44-120 %		Dilution: 5x						
p-Terphenyl-d14 (Surr)		100 %		54-127 %		"						
Matrix Spike (9071207-MS1)						Prepared: 07/24/19 07:01 Analyzed: 07/24/19 19:57						
QC Source Sample: Non-SDG (A9G0710-03)												
EPA 8270D (SIM)												
Acenaphthene	0.651	0.00599	0.0120	mg/kg dry	1	0.959	ND	68	40-122%	---	---	
Acenaphthylene	0.586	0.00599	0.0120	mg/kg dry	1	0.959	ND	61	32-132%	---	---	
Anthracene	0.619	0.00599	0.0120	mg/kg dry	1	0.959	ND	65	47-123%	---	---	
Benz(a)anthracene	0.623	0.00599	0.0120	mg/kg dry	1	0.959	0.0136	64	49-126%	---	---	
Benzo(a)pyrene	0.702	0.00599	0.0120	mg/kg dry	1	0.959	ND	73	45-129%	---	---	
Benzo(b)fluoranthene	0.761	0.00599	0.0120	mg/kg dry	1	0.959	0.00783	79	45-132%	---	---	
Benzo(k)fluoranthene	0.738	0.00599	0.0120	mg/kg dry	1	0.959	ND	77	47-132%	---	---	
Benzo(g,h,i)perylene	0.567	0.00599	0.0120	mg/kg dry	1	0.959	ND	59	43-134%	---	---	
Chrysene	0.713	0.00599	0.0120	mg/kg dry	1	0.959	0.0180	72	50-124%	---	---	
Dibenz(a,h)anthracene	0.640	0.00599	0.0120	mg/kg dry	1	0.959	ND	67	45-134%	---	---	
Dibenzofuran	0.686	0.00599	0.0120	mg/kg dry	1	0.959	ND	72	44-120%	---	---	
Fluoranthene	0.701	0.00599	0.0120	mg/kg dry	1	0.959	0.0470	68	50-127%	---	---	
Fluorene	0.684	0.00599	0.0120	mg/kg dry	1	0.959	ND	71	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.593	0.00599	0.0120	mg/kg dry	1	0.959	ND	62	45-133%	---	---	
1-Methylnaphthalene	0.683	0.00599	0.0120	mg/kg dry	1	0.959	ND	71	40-120%	---	---	
2-Methylnaphthalene	0.686	0.00599	0.0120	mg/kg dry	1	0.959	ND	72	38-122%	---	---	
Naphthalene	0.651	0.00599	0.0120	mg/kg dry	1	0.959	0.00605	67	35-123%	---	---	
Phenanthrene	0.810	0.00599	0.0120	mg/kg dry	1	0.959	0.146	69	50-121%	---	---	
Pyrene	0.719	0.00599	0.0120	mg/kg dry	1	0.959	0.0921	65	47-127%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 70 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		78 %		54-127 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Blank (9071408-BLK2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:01							
EPA 8270D												
Acenaphthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Phenol	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Blank (9071408-BLK2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:01							
2,3,5,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.0188	0.0375	mg/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Aniline	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 9071408 - EPA 3546						Soil							
Blank (9071408-BLK2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:01								
Benzoic acid	ND	0.157	0.312	mg/kg wet	1	---	---	---	---	---	---	Q-52	
Benzyl alcohol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---		
Isophorone	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---		
Azobenzene (1,2-DPH)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---		
Bis(2-Ethylhexyl) adipate	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---		
3,3'-Dichlorobenzidine	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---		
1,2-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---		
1,3-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---		
1,4-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	Q-41	
Pyridine	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---		
Surr: Nitrobenzene-d5 (Surr)			Recovery: 72 %		Limits: 37-122 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)			76 %		44-115 %		"						
Phenol-d6 (Surr)			72 %		33-122 %		"						
p-Terphenyl-d14 (Surr)			98 %		54-127 %		"						
2-Fluorophenol (Surr)			72 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)			99 %		39-132 %		"						
LCS (9071408-BS2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:37								
EPA 8270D													
Acenaphthene	0.469	0.00266	0.00534	mg/kg wet	2	0.533	---	88	40-122%	---	---		
Acenaphthylene	0.485	0.00266	0.00534	mg/kg wet	2	0.533	---	91	32-132%	---	---		
Anthracene	0.480	0.00266	0.00534	mg/kg wet	2	0.533	---	90	47-123%	---	---		
Benz(a)anthracene	0.483	0.00266	0.00534	mg/kg wet	2	0.533	---	91	49-126%	---	---		
Benzo(a)pyrene	0.574	0.00400	0.00800	mg/kg wet	2	0.533	---	108	45-129%	---	---		
Benzo(b)fluoranthene	0.558	0.00400	0.00800	mg/kg wet	2	0.533	---	105	45-132%	---	---		
Benzo(k)fluoranthene	0.561	0.00400	0.00800	mg/kg wet	2	0.533	---	105	47-132%	---	---		
Benzo(g,h,i)perylene	0.507	0.00266	0.00534	mg/kg wet	2	0.533	---	95	43-134%	---	---		
Chrysene	0.496	0.00266	0.00534	mg/kg wet	2	0.533	---	93	50-124%	---	---		
Dibenz(a,h)anthracene	0.535	0.00266	0.00534	mg/kg wet	2	0.533	---	100	45-134%	---	---		
Fluoranthene	0.492	0.00266	0.00534	mg/kg wet	2	0.533	---	92	50-127%	---	---		
Fluorene	0.505	0.00266	0.00534	mg/kg wet	2	0.533	---	95	43-125%	---	---		
Indeno(1,2,3-cd)pyrene	0.492	0.00266	0.00534	mg/kg wet	2	0.533	---	92	45-133%	---	---		
1-Methylnaphthalene	0.458	0.00534	0.0107	mg/kg wet	2	0.533	---	86	40-120%	---	---		
2-Methylnaphthalene	0.467	0.00534	0.0107	mg/kg wet	2	0.533	---	88	38-122%	---	---		

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EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
LCS (9071408-BS2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:37							
Naphthalene	0.427	0.00534	0.0107	mg/kg wet	2	0.533	---	80	35-123%	---	---	
Phenanthrene	0.476	0.00266	0.00534	mg/kg wet	2	0.533	---	89	50-121%	---	---	
Pyrene	0.498	0.00266	0.00534	mg/kg wet	2	0.533	---	93	47-127%	---	---	
Carbazole	0.467	0.00400	0.00800	mg/kg wet	2	0.533	---	88	50-122%	---	---	
Dibenzofuran	0.489	0.00266	0.00534	mg/kg wet	2	0.533	---	92	44-120%	---	---	
4-Chloro-3-methylphenol	0.507	0.0266	0.0534	mg/kg wet	2	0.533	---	95	45-122%	---	---	
2-Chlorophenol	0.452	0.0133	0.0266	mg/kg wet	2	0.533	---	85	34-121%	---	---	
2,4-Dichlorophenol	0.520	0.0133	0.0266	mg/kg wet	2	0.533	---	97	40-122%	---	---	
2,4-Dimethylphenol	0.449	0.0133	0.0266	mg/kg wet	2	0.533	---	84	30-127%	---	---	
2,4-Dinitrophenol	0.667	0.0666	0.133	mg/kg wet	2	0.533	---	125	5-137%	---	---	Q-41
4,6-Dinitro-2-methylphenol	0.699	0.0666	0.133	mg/kg wet	2	0.533	---	131	29-132%	---	---	Q-41
2-Methylphenol	0.438	0.00666	0.0133	mg/kg wet	2	0.533	---	82	32-122%	---	---	
3+4-Methylphenol(s)	0.452	0.00666	0.0133	mg/kg wet	2	0.533	---	85	34-120%	---	---	
2-Nitrophenol	0.526	0.0266	0.0534	mg/kg wet	2	0.533	---	99	36-123%	---	---	Q-41
4-Nitrophenol	0.485	0.0266	0.0534	mg/kg wet	2	0.533	---	91	30-132%	---	---	Q-31
Pentachlorophenol (PCP)	0.559	0.0266	0.0534	mg/kg wet	2	0.533	---	105	25-133%	---	---	
Phenol	0.443	0.00534	0.0107	mg/kg wet	2	0.533	---	83	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.558	0.0133	0.0266	mg/kg wet	2	0.533	---	105	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.589	0.0133	0.0266	mg/kg wet	2	0.533	---	111	40-120%	---	---	Q-41
2,4,5-Trichlorophenol	0.550	0.0133	0.0266	mg/kg wet	2	0.533	---	103	41-124%	---	---	
2,4,6-Trichlorophenol	0.534	0.0133	0.0266	mg/kg wet	2	0.533	---	100	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.501	0.0400	0.0800	mg/kg wet	2	0.533	---	94	51-133%	---	---	
Butyl benzyl phthalate	0.483	0.0266	0.0534	mg/kg wet	2	0.533	---	91	48-132%	---	---	
Diethylphthalate	0.538	0.0266	0.0534	mg/kg wet	2	0.533	---	101	50-124%	---	---	
Dimethylphthalate	0.528	0.0266	0.0534	mg/kg wet	2	0.533	---	99	48-124%	---	---	
Di-n-butylphthalate	0.460	0.0266	0.0534	mg/kg wet	2	0.533	---	86	51-128%	---	---	
Di-n-octyl phthalate	0.551	0.0266	0.0534	mg/kg wet	2	0.533	---	103	44-140%	---	---	
N-Nitrosodimethylamine	0.365	0.00666	0.0133	mg/kg wet	2	0.533	---	68	23-120%	---	---	
N-Nitroso-di-n-propylamine	0.407	0.00666	0.0133	mg/kg wet	2	0.533	---	76	36-120%	---	---	
N-Nitrosodiphenylamine	0.495	0.00666	0.0133	mg/kg wet	2	0.533	---	93	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.417	0.00666	0.0133	mg/kg wet	2	0.533	---	78	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.393	0.00666	0.0133	mg/kg wet	2	0.533	---	74	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.357	0.00666	0.0133	mg/kg wet	2	0.533	---	67	33-131%	---	---	
Hexachlorobenzene	0.497	0.00266	0.00534	mg/kg wet	2	0.533	---	93	44-122%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
LCS (9071408-BS2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:37							
Hexachlorobutadiene	0.480	0.00666	0.0133	mg/kg wet	2	0.533	---	90	32-123%	---	---	Q-41
Hexachlorocyclopentadiene	0.154	0.0133	0.0266	mg/kg wet	2	0.533	---	29	5-140%	---	---	
Hexachloroethane	0.360	0.00666	0.0133	mg/kg wet	2	0.533	---	67	28-120%	---	---	
2-Chloronaphthalene	0.442	0.00266	0.00534	mg/kg wet	2	0.533	---	83	41-120%	---	---	
1,2-Dichlorobenzene	0.424	0.00666	0.0133	mg/kg wet	2	0.533	---	79	33-120%	---	---	Q-41
1,3-Dichlorobenzene	0.419	0.00666	0.0133	mg/kg wet	2	0.533	---	79	30-120%	---	---	
1,4-Dichlorobenzene	0.425	0.00666	0.0133	mg/kg wet	2	0.533	---	80	31-120%	---	---	
1,2,4-Trichlorobenzene	0.459	0.00666	0.0133	mg/kg wet	2	0.533	---	86	34-120%	---	---	
4-Bromophenyl phenyl ether	0.496	0.00666	0.0133	mg/kg wet	2	0.533	---	93	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.519	0.00666	0.0133	mg/kg wet	2	0.533	---	97	45-121%	---	---	
Aniline	0.359	0.0133	0.0266	mg/kg wet	2	0.533	---	67	7-120%	---	---	
4-Chloroaniline	0.319	0.00666	0.0133	mg/kg wet	2	0.533	---	60	16-120%	---	---	
2-Nitroaniline	0.531	0.0534	0.107	mg/kg wet	2	0.533	---	100	44-127%	---	---	
3-Nitroaniline	0.423	0.0534	0.107	mg/kg wet	2	0.533	---	79	33-120%	---	---	
4-Nitroaniline	0.537	0.0534	0.107	mg/kg wet	2	0.533	---	101	35-120%	---	---	
Nitrobenzene	0.418	0.0266	0.0534	mg/kg wet	2	0.533	---	78	34-122%	---	---	
2,4-Dinitrotoluene	0.564	0.0266	0.0534	mg/kg wet	2	0.533	---	106	48-126%	---	---	
2,6-Dinitrotoluene	0.546	0.0266	0.0534	mg/kg wet	2	0.533	---	102	46-124%	---	---	
Benzoic acid	0.953	0.334	0.666	mg/kg wet	2	1.07	---	89	5-140%	---	---	
Benzyl alcohol	0.431	0.0133	0.0266	mg/kg wet	2	0.533	---	81	29-122%	---	---	
Isophorone	0.427	0.00666	0.0133	mg/kg wet	2	0.533	---	80	30-122%	---	---	
Azobenzene (1,2-DPH)	0.415	0.00666	0.0133	mg/kg wet	2	0.533	---	78	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.453	0.0666	0.133	mg/kg wet	2	0.533	---	85	60-121%	---	---	
3,3'-Dichlorobenzidine	0.952	0.0534	0.107	mg/kg wet	2	1.07	---	89	22-121%	---	---	
1,2-Dinitrobenzene	0.543	0.0666	0.133	mg/kg wet	2	0.533	---	102	44-120%	---	---	
1,3-Dinitrobenzene	0.563	0.0666	0.133	mg/kg wet	2	0.533	---	106	42-127%	---	---	
1,4-Dinitrobenzene	0.608	0.0666	0.133	mg/kg wet	2	0.533	---	114	37-132%	---	---	
Pyridine	0.299	0.0133	0.0266	mg/kg wet	2	0.533	---	56	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 81 %		Limits: 37-122 %		Dilution: 2x						
2-Fluorobiphenyl (Surr)		90 %		44-115 %		"						
Phenol-d6 (Surr)		83 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		100 %		54-127 %		"						
2-Fluorophenol (Surr)		83 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		120 %		39-132 %		"						
											Q-41	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Duplicate (9071408-DUP4)						Prepared: 07/30/19 13:20 Analyzed: 07/31/19 20:39						
QC Source Sample: DP-10(6-7.5) (A9G0676-35RE2)												
EPA 8270D												
Acenaphthene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	0.00301	0.00146	0.00292	mg/kg dry	1	---	0.00810	---	---	92	30%	Q-05
Anthracene	0.00305	0.00146	0.00292	mg/kg dry	1	---	0.00541	---	---	56	30%	Q-05
Benz(a)anthracene	0.0137	0.00146	0.00292	mg/kg dry	1	---	0.0366	---	---	91	30%	Q-05
Benzo(a)pyrene	0.0218	0.00219	0.00438	mg/kg dry	1	---	0.0695	---	---	105	30%	Q-05
Benzo(b)fluoranthene	0.0232	0.00219	0.00438	mg/kg dry	1	---	0.0779	---	---	108	30%	Q-04
Benzo(k)fluoranthene	0.00834	0.00219	0.00438	mg/kg dry	1	---	0.0261	---	---	103	30%	Q-05
Benzo(g,h,i)perylene	0.0208	0.00146	0.00292	mg/kg dry	1	---	0.0701	---	---	108	30%	Q-04
Chrysene	0.0190	0.00146	0.00292	mg/kg dry	1	---	0.0576	---	---	101	30%	Q-04
Dibenz(a,h)anthracene	0.00230	0.00146	0.00292	mg/kg dry	1	---	0.00669	---	---	98	30%	Q-05, J
Fluoranthene	0.0307	0.00146	0.00292	mg/kg dry	1	---	0.117	---	---	117	30%	Q-04
Fluorene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	0.0174	0.00146	0.00292	mg/kg dry	1	---	0.0557	---	---	105	30%	Q-04
1-Methylnaphthalene	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	0.0132	0.00146	0.00292	mg/kg dry	1	---	0.0471	---	---	112	30%	Q-05
Pyrene	0.0436	0.00146	0.00292	mg/kg dry	1	---	0.164	---	---	116	30%	Q-04
Carbazole	ND	0.00219	0.00438	mg/kg dry	1	---	ND	---	---	---	30%	
Dibenzofuran	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
2-Chlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylphenol	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Nitrophenol	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
4-Nitrophenol	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Duplicate (9071408-DUP4)			Prepared: 07/30/19 13:20		Analyzed: 07/31/19 20:39							
QC Source Sample: DP-10(6-7.5) (A9G0676-35RE2)												
Phenol	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	0.0219	0.0438	mg/kg dry	1	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Diethylphthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Dimethylphthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachloroethane	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Aniline	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
4-Chloroaniline	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Nitroaniline	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	
3-Nitroaniline	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	
4-Nitroaniline	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Duplicate (9071408-DUP4)			Prepared: 07/30/19 13:20 Analyzed: 07/31/19 20:39									
QC Source Sample: DP-10(6-7.5) (A9G0676-35RE2)												
Nitrobenzene	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	Q-52
2,4-Dinitrotoluene	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Benzoic acid	ND	0.183	0.364	mg/kg dry	1	---	ND	---	---	---	30%	
Benzyl alcohol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Isophorone	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	
1,2-Dinitrobenzene	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
Pyridine	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 84 %		Limits: 37-122 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		79 %		44-115 %		"						
Phenol-d6 (Surr)		84 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		88 %		54-127 %		"						
2-Fluorophenol (Surr)		79 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		93 %		39-132 %		"						

Matrix Spike (9071408-MS2)

Prepared: 07/30/19 13:20 Analyzed: 07/31/19 21:51

QC Source Sample: Non-SDG (A9G0922-02RE2)**EPA 8270D**

Acenaphthene	0.398	0.00273	0.00547	mg/kg dry	2	0.546	ND	73	40-122%	---	---
Acenaphthylene	0.409	0.00273	0.00547	mg/kg dry	2	0.546	ND	75	32-132%	---	---
Anthracene	0.420	0.00273	0.00547	mg/kg dry	2	0.546	ND	77	47-123%	---	---
Benz(a)anthracene	0.430	0.00273	0.00547	mg/kg dry	2	0.546	ND	79	49-126%	---	---
Benzo(a)pyrene	0.500	0.00410	0.00820	mg/kg dry	2	0.546	ND	92	45-129%	---	---
Benzo(b)fluoranthene	0.483	0.00410	0.00820	mg/kg dry	2	0.546	ND	88	45-132%	---	---
Benzo(k)fluoranthene	0.494	0.00410	0.00820	mg/kg dry	2	0.546	ND	90	47-132%	---	---
Benzo(g,h,i)perylene	0.453	0.00273	0.00547	mg/kg dry	2	0.546	ND	83	43-134%	---	---
Chrysene	0.438	0.00273	0.00547	mg/kg dry	2	0.546	ND	80	50-124%	---	---
Dibenz(a,h)anthracene	0.472	0.00273	0.00547	mg/kg dry	2	0.546	ND	86	45-134%	---	---

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Matrix Spike (9071408-MS2)			Prepared: 07/30/19 13:20		Analyzed: 07/31/19 21:51							
QC Source Sample: Non-SDG (A9G0922-02RE2)												
Fluoranthene	0.443	0.00273	0.00547	mg/kg dry	2	0.546	ND	81	50-127%	---	---	
Fluorene	0.450	0.00273	0.00547	mg/kg dry	2	0.546	ND	82	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.437	0.00273	0.00547	mg/kg dry	2	0.546	ND	80	45-133%	---	---	
1-Methylnaphthalene	0.382	0.00547	0.0109	mg/kg dry	2	0.546	ND	70	40-120%	---	---	
2-Methylnaphthalene	0.395	0.00547	0.0109	mg/kg dry	2	0.546	ND	72	38-122%	---	---	
Naphthalene	0.373	0.00547	0.0109	mg/kg dry	2	0.546	ND	68	35-123%	---	---	
Phenanthrene	0.425	0.00273	0.00547	mg/kg dry	2	0.546	ND	78	50-121%	---	---	
Pyrene	0.448	0.00273	0.00547	mg/kg dry	2	0.546	ND	82	47-127%	---	---	
Carbazole	0.425	0.00410	0.00820	mg/kg dry	2	0.546	ND	78	50-122%	---	---	
Dibenzofuran	0.428	0.00273	0.00547	mg/kg dry	2	0.546	ND	78	44-120%	---	---	
4-Chloro-3-methylphenol	0.426	0.0273	0.0547	mg/kg dry	2	0.546	ND	78	45-122%	---	---	
2-Chlorophenol	0.397	0.0137	0.0273	mg/kg dry	2	0.546	ND	73	34-121%	---	---	
2,4-Dichlorophenol	0.433	0.0137	0.0273	mg/kg dry	2	0.546	ND	79	40-122%	---	---	
2,4-Dimethylphenol	0.370	0.0137	0.0273	mg/kg dry	2	0.546	ND	68	30-127%	---	---	
2,4-Dinitrophenol	0.570	0.0682	0.137	mg/kg dry	2	0.546	ND	104	5-137%	---	---	Q-41
4,6-Dinitro-2-methylphenol	0.662	0.0682	0.137	mg/kg dry	2	0.546	ND	121	29-132%	---	---	Q-41
2-Methylphenol	0.372	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	32-122%	---	---	
3+4-Methylphenol(s)	0.373	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	34-120%	---	---	
2-Nitrophenol	0.450	0.0273	0.0547	mg/kg dry	2	0.546	ND	82	36-123%	---	---	
4-Nitrophenol	0.426	0.0273	0.0547	mg/kg dry	2	0.546	ND	78	30-132%	---	---	
Pentachlorophenol (PCP)	0.464	0.0273	0.0547	mg/kg dry	2	0.546	ND	85	25-133%	---	---	
Phenol	0.382	0.00547	0.0109	mg/kg dry	2	0.546	ND	70	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.480	0.0137	0.0273	mg/kg dry	2	0.546	ND	88	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.506	0.0137	0.0273	mg/kg dry	2	0.546	ND	93	40-120%	---	---	Q-41
2,4,5-Trichlorophenol	0.460	0.0137	0.0273	mg/kg dry	2	0.546	ND	84	41-124%	---	---	
2,4,6-Trichlorophenol	0.439	0.0137	0.0273	mg/kg dry	2	0.546	ND	80	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.449	0.0410	0.0820	mg/kg dry	2	0.546	ND	82	51-133%	---	---	
Butyl benzyl phthalate	0.431	0.0273	0.0547	mg/kg dry	2	0.546	ND	79	48-132%	---	---	
Diethylphthalate	0.490	0.0273	0.0547	mg/kg dry	2	0.546	ND	90	50-124%	---	---	
Dimethylphthalate	0.465	0.0273	0.0547	mg/kg dry	2	0.546	ND	85	48-124%	---	---	
Di-n-butylphthalate	0.419	0.0273	0.0547	mg/kg dry	2	0.546	ND	77	51-128%	---	---	
Di-n-octyl phthalate	0.480	0.0273	0.0547	mg/kg dry	2	0.546	ND	88	44-140%	---	---	
N-Nitrosodimethylamine	0.312	0.00682	0.0137	mg/kg drv	2	0.546	ND	57	23-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Matrix Spike (9071408-MS2)			Prepared: 07/30/19 13:20		Analyzed: 07/31/19 21:51							
QC Source Sample: Non-SDG (A9G0922-02RE2)												
N-Nitroso-di-n-propylamine	0.334	0.00682	0.0137	mg/kg dry	2	0.546	ND	61	36-120%	---	---	
N-Nitrosodiphenylamine	0.425	0.00682	0.0137	mg/kg dry	2	0.546	ND	78	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.358	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.355	0.00682	0.0137	mg/kg dry	2	0.546	ND	65	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.323	0.00682	0.0137	mg/kg dry	2	0.546	ND	59	33-131%	---	---	
Hexachlorobenzene	0.432	0.00273	0.00547	mg/kg dry	2	0.546	ND	79	44-122%	---	---	
Hexachlorobutadiene	0.419	0.00682	0.0137	mg/kg dry	2	0.546	ND	77	32-123%	---	---	
Hexachlorocyclopentadiene	0.408	0.0137	0.0273	mg/kg dry	2	0.546	ND	75	5-140%	---	---	Q-41
Hexachloroethane	0.362	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	28-120%	---	---	
2-Chloronaphthalene	0.377	0.00273	0.00547	mg/kg dry	2	0.546	ND	69	41-120%	---	---	
1,2-Dichlorobenzene	0.370	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	33-120%	---	---	
1,3-Dichlorobenzene	0.363	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	30-120%	---	---	
1,4-Dichlorobenzene	0.370	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	31-120%	---	---	
1,2,4-Trichlorobenzene	0.401	0.00682	0.0137	mg/kg dry	2	0.546	ND	73	34-120%	---	---	
4-Bromophenyl phenyl ether	0.424	0.00682	0.0137	mg/kg dry	2	0.546	ND	78	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.462	0.00682	0.0137	mg/kg dry	2	0.546	ND	85	45-121%	---	---	
Aniline	0.315	0.0137	0.0273	mg/kg dry	2	0.546	ND	58	7-120%	---	---	
4-Chloroaniline	0.363	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	16-120%	---	---	
2-Nitroaniline	0.463	0.0547	0.109	mg/kg dry	2	0.546	ND	85	44-127%	---	---	
3-Nitroaniline	0.441	0.0547	0.109	mg/kg dry	2	0.546	ND	81	33-120%	---	---	
4-Nitroaniline	0.496	0.0547	0.109	mg/kg dry	2	0.546	ND	91	35-120%	---	---	
Nitrobenzene	0.363	0.0273	0.0547	mg/kg dry	2	0.546	ND	66	34-122%	---	---	
2,4-Dinitrotoluene	0.517	0.0273	0.0547	mg/kg dry	2	0.546	ND	95	48-126%	---	---	Q-41
2,6-Dinitrotoluene	0.484	0.0273	0.0547	mg/kg dry	2	0.546	ND	88	46-124%	---	---	
Benzoic acid	0.526	0.342	0.342	mg/kg dry	2	1.09	ND	48	5-140%	---	---	
Benzyl alcohol	0.359	0.0137	0.0273	mg/kg dry	2	0.546	ND	66	29-122%	---	---	
Isophorone	0.348	0.00682	0.0137	mg/kg dry	2	0.546	ND	64	30-122%	---	---	
Azobenzene (1,2-DPH)	0.363	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.405	0.0682	0.137	mg/kg dry	2	0.546	ND	74	60-121%	---	---	
3,3'-Dichlorobenzidine	0.891	0.0547	0.109	mg/kg dry	2	1.09	ND	82	22-121%	---	---	Q-41
1,2-Dinitrobenzene	0.492	0.0682	0.137	mg/kg dry	2	0.546	ND	90	44-120%	---	---	Q-41
1,3-Dinitrobenzene	0.512	0.0682	0.137	mg/kg dry	2	0.546	ND	94	42-127%	---	---	Q-41
1,4-Dinitrobenzene	0.551	0.0682	0.137	mg/kg drv	2	0.546	ND	101	37-132%	---	---	Q-41

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Matrix Spike (9071408-MS2)			Prepared: 07/30/19 13:20 Analyzed: 07/31/19 21:51									
QC Source Sample: Non-SDG (A9G0922-02RE2)												
Pyridine	0.235	0.0137	0.0273	mg/kg dry	2	0.546	ND	43	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 69 %		Limits: 37-122 %		Dilution: 2x						
2-Fluorobiphenyl (Surr)		75 %		44-115 %		"						
Phenol-d6 (Surr)		71 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		86 %		54-127 %		"						
2-Fluorophenol (Surr)		70 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		102 %		39-132 %		"						

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Project Number: [none]

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QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Blank (9080555-BLK2)			Prepared: 08/01/19 15:37 Analyzed: 08/01/19 22:33									
EPA 8270D												
Acenaphthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Phenol	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Blank (9080555-BLK2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 22:33							
2,3,5,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.0188	0.0375	mg/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Aniline	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Blank (9080555-BLK2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 22:33							
Benzoic acid	ND	0.157	0.312	mg/kg wet	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Isophorone	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 64 %		Limits: 37-122 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		70 %		44-115 %		"						
Phenol-d6 (Surr)		66 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		83 %		54-127 %		"						
2-Fluorophenol (Surr)		64 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		85 %		39-132 %		"						
LCS (9080555-BS2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 23:08							
EPA 8270D												
Acenaphthene	0.425	0.00532	0.0107	mg/kg wet	4	0.533	---	80	40-122%	---	---	
Acenaphthylene	0.447	0.00532	0.0107	mg/kg wet	4	0.533	---	84	32-132%	---	---	
Anthracene	0.453	0.00532	0.0107	mg/kg wet	4	0.533	---	85	47-123%	---	---	
Benz(a)anthracene	0.451	0.00532	0.0107	mg/kg wet	4	0.533	---	85	49-126%	---	---	
Benzo(a)pyrene	0.479	0.00800	0.0160	mg/kg wet	4	0.533	---	90	45-129%	---	---	
Benzo(b)fluoranthene	0.465	0.00800	0.0160	mg/kg wet	4	0.533	---	87	45-132%	---	---	
Benzo(k)fluoranthene	0.475	0.00800	0.0160	mg/kg wet	4	0.533	---	89	47-132%	---	---	
Benzo(g,h,i)perylene	0.465	0.00532	0.0107	mg/kg wet	4	0.533	---	87	43-134%	---	---	
Chrysene	0.463	0.00532	0.0107	mg/kg wet	4	0.533	---	87	50-124%	---	---	
Dibenz(a,h)anthracene	0.449	0.00532	0.0107	mg/kg wet	4	0.533	---	84	45-134%	---	---	
Fluoranthene	0.471	0.00532	0.0107	mg/kg wet	4	0.533	---	88	50-127%	---	---	
Fluorene	0.431	0.00532	0.0107	mg/kg wet	4	0.533	---	81	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.427	0.00532	0.0107	mg/kg wet	4	0.533	---	80	45-133%	---	---	
1-Methylnaphthalene	0.409	0.0107	0.0213	mg/kg wet	4	0.533	---	77	40-120%	---	---	
2-Methylnaphthalene	0.422	0.0107	0.0213	mg/kg wet	4	0.533	---	79	38-122%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
LCS (9080555-BS2)						Prepared: 08/01/19 15:37 Analyzed: 08/01/19 23:08						
Naphthalene	0.416	0.0107	0.0213	mg/kg wet	4	0.533	---	78	35-123%	---	---	
Phenanthrene	0.438	0.00532	0.0107	mg/kg wet	4	0.533	---	82	50-121%	---	---	
Pyrene	0.478	0.00532	0.0107	mg/kg wet	4	0.533	---	90	47-127%	---	---	
Carbazole	0.480	0.00800	0.0160	mg/kg wet	4	0.533	---	90	50-122%	---	---	
Dibenzofuran	0.435	0.00532	0.0107	mg/kg wet	4	0.533	---	82	44-120%	---	---	
4-Chloro-3-methylphenol	0.435	0.0532	0.107	mg/kg wet	4	0.533	---	82	45-122%	---	---	
2-Chlorophenol	0.408	0.0267	0.0532	mg/kg wet	4	0.533	---	76	34-121%	---	---	
2,4-Dichlorophenol	0.486	0.0267	0.0532	mg/kg wet	4	0.533	---	91	40-122%	---	---	
2,4-Dimethylphenol	0.452	0.0267	0.0532	mg/kg wet	4	0.533	---	85	30-127%	---	---	
2,4-Dinitrophenol	0.450	0.133	0.267	mg/kg wet	4	0.533	---	84	5-137%	---	---	
4,6-Dinitro-2-methylphenol	0.517	0.133	0.267	mg/kg wet	4	0.533	---	97	29-132%	---	---	
2-Methylphenol	0.407	0.0133	0.0267	mg/kg wet	4	0.533	---	76	32-122%	---	---	
3+4-Methylphenol(s)	0.432	0.0133	0.0267	mg/kg wet	4	0.533	---	81	34-120%	---	---	
2-Nitrophenol	0.422	0.0532	0.107	mg/kg wet	4	0.533	---	79	36-123%	---	---	
4-Nitrophenol	0.448	0.0532	0.107	mg/kg wet	4	0.533	---	84	30-132%	---	---	
Pentachlorophenol (PCP)	0.473	0.0532	0.107	mg/kg wet	4	0.533	---	89	25-133%	---	---	
Phenol	0.387	0.0107	0.0213	mg/kg wet	4	0.533	---	73	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.453	0.0267	0.0532	mg/kg wet	4	0.533	---	85	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.439	0.0267	0.0532	mg/kg wet	4	0.533	---	82	40-120%	---	---	
2,4,5-Trichlorophenol	0.464	0.0267	0.0532	mg/kg wet	4	0.533	---	87	41-124%	---	---	
2,4,6-Trichlorophenol	0.466	0.0267	0.0532	mg/kg wet	4	0.533	---	87	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.464	0.0800	0.160	mg/kg wet	4	0.533	---	87	51-133%	---	---	
Butyl benzyl phthalate	0.452	0.0532	0.107	mg/kg wet	4	0.533	---	85	48-132%	---	---	
Diethylphthalate	0.454	0.0532	0.107	mg/kg wet	4	0.533	---	85	50-124%	---	---	
Dimethylphthalate	0.431	0.0532	0.107	mg/kg wet	4	0.533	---	81	48-124%	---	---	
Di-n-butylphthalate	0.483	0.0532	0.107	mg/kg wet	4	0.533	---	91	51-128%	---	---	
Di-n-octyl phthalate	0.468	0.0532	0.107	mg/kg wet	4	0.533	---	88	44-140%	---	---	
N-Nitrosodimethylamine	0.382	0.0133	0.0267	mg/kg wet	4	0.533	---	72	23-120%	---	---	
N-Nitroso-di-n-propylamine	0.375	0.0133	0.0267	mg/kg wet	4	0.533	---	70	36-120%	---	---	
N-Nitrosodiphenylamine	0.463	0.0133	0.0267	mg/kg wet	4	0.533	---	87	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.446	0.0133	0.0267	mg/kg wet	4	0.533	---	84	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.365	0.0133	0.0267	mg/kg wet	4	0.533	---	68	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.345	0.0133	0.0267	mg/kg wet	4	0.533	---	65	33-131%	---	---	
Hexachlorobenzene	0.434	0.00532	0.0107	mg/kg wet	4	0.533	---	81	44-122%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
LCS (9080555-BS2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 23:08							
Hexachlorobutadiene	0.409	0.0133	0.0267	mg/kg wet	4	0.533	---	77	32-123%	---	---	Q-41
Hexachlorocyclopentadiene	0.467	0.0267	0.0532	mg/kg wet	4	0.533	---	88	5-140%	---	---	
Hexachloroethane	0.416	0.0133	0.0267	mg/kg wet	4	0.533	---	78	28-120%	---	---	
2-Chloronaphthalene	0.434	0.00532	0.0107	mg/kg wet	4	0.533	---	81	41-120%	---	---	J
1,2-Dichlorobenzene	0.380	0.0133	0.0267	mg/kg wet	4	0.533	---	71	33-120%	---	---	
1,3-Dichlorobenzene	0.386	0.0133	0.0267	mg/kg wet	4	0.533	---	72	30-120%	---	---	
1,4-Dichlorobenzene	0.396	0.0133	0.0267	mg/kg wet	4	0.533	---	74	31-120%	---	---	
1,2,4-Trichlorobenzene	0.430	0.0133	0.0267	mg/kg wet	4	0.533	---	81	34-120%	---	---	
4-Bromophenyl phenyl ether	0.440	0.0133	0.0267	mg/kg wet	4	0.533	---	83	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.435	0.0133	0.0267	mg/kg wet	4	0.533	---	81	45-121%	---	---	
Aniline	0.290	0.0267	0.0532	mg/kg wet	4	0.533	---	54	7-120%	---	---	
4-Chloroaniline	0.353	0.0133	0.0267	mg/kg wet	4	0.533	---	66	16-120%	---	---	
2-Nitroaniline	0.435	0.107	0.213	mg/kg wet	4	0.533	---	82	44-127%	---	---	
3-Nitroaniline	0.342	0.107	0.213	mg/kg wet	4	0.533	---	64	33-120%	---	---	
4-Nitroaniline	0.473	0.107	0.213	mg/kg wet	4	0.533	---	89	35-120%	---	---	
Nitrobenzene	0.374	0.0532	0.107	mg/kg wet	4	0.533	---	70	34-122%	---	---	
2,4-Dinitrotoluene	0.458	0.0532	0.107	mg/kg wet	4	0.533	---	86	48-126%	---	---	
2,6-Dinitrotoluene	0.460	0.0532	0.107	mg/kg wet	4	0.533	---	86	46-124%	---	---	
Benzoic acid	0.601	0.400	1.33	mg/kg wet	4	1.07	---	56	5-140%	---	---	
Benzyl alcohol	0.387	0.0267	0.0532	mg/kg wet	4	0.533	---	72	29-122%	---	---	
Isophorone	0.414	0.0133	0.0267	mg/kg wet	4	0.533	---	78	30-122%	---	---	
Azobenzene (1,2-DPH)	0.428	0.0133	0.0267	mg/kg wet	4	0.533	---	80	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.446	0.133	0.267	mg/kg wet	4	0.533	---	84	60-121%	---	---	
3,3'-Dichlorobenzidine	2.15	0.107	0.213	mg/kg wet	4	1.07	---	201	22-121%	---	---	
1,2-Dinitrobenzene	0.441	0.133	0.267	mg/kg wet	4	0.533	---	83	44-120%	---	---	
1,3-Dinitrobenzene	0.436	0.133	0.267	mg/kg wet	4	0.533	---	82	42-127%	---	---	
1,4-Dinitrobenzene	0.426	0.133	0.267	mg/kg wet	4	0.533	---	80	37-132%	---	---	
Pyridine	0.288	0.0267	0.0532	mg/kg wet	4	0.533	---	54	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 63 %		Limits: 37-122 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		76 %		44-115 %		"						
Phenol-d6 (Surr)		69 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		84 %		54-127 %		"						
2-Fluorophenol (Surr)		68 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		86 %		39-132 %		"						

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Duplicate (9080555-DUP3)												
QC Source Sample: DP-2(21-22.5) (A9G0676-08RE1)												
EPA 8270D												
Acenaphthene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Acenaphthylene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Anthracene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Chrysene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Fluoranthene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Fluorene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	0.0286	0.0571	mg/kg dry	10	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	0.0286	0.0571	mg/kg dry	10	---	ND	---	---	---	30%	
Naphthalene	ND	0.0286	0.0571	mg/kg dry	10	---	ND	---	---	---	30%	
Phenanthrene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Pyrene	ND	0.0143	0.0286	mg/kg dry	10	---	0.0169	---	---	***	30%	Q-05
Carbazole	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Dibenzofuran	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
2-Chlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Methylphenol	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Nitrophenol	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
4-Nitrophenol	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Duplicate (9080555-DUP3)			Prepared: 08/01/19 15:37		Analyzed: 08/02/19 11:06							
QC Source Sample: DP-2(21-22.5) (A9G0676-08RE1)												
Phenol	ND	0.0286	0.0571	mg/kg dry	10	---	0.0302	---	---	***	30%	Q-05
2,3,4,6-Tetrachlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	0.214	0.429	mg/kg dry	10	---	0.250	---	---	***	30%	Q-05
Butyl benzyl phthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Diethylphthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Dimethylphthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachloroethane	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Aniline	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
4-Chloroaniline	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Nitroaniline	ND	0.286	0.571	mg/kg dry	10	---	ND	---	---	---	30%	
3-Nitroaniline	ND	0.286	0.571	mg/kg dry	10	---	ND	---	---	---	30%	
4-Nitroaniline	ND	0.286	0.571	mg/kg drv	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Duplicate (9080555-DUP3)			Prepared: 08/01/19 15:37 Analyzed: 08/02/19 11:06									
QC Source Sample: DP-2(21-22.5) (A9G0676-08RE1)												
Nitrobenzene	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	Q-04
2,4-Dinitrotoluene	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Benzoic acid	ND	1.79	3.57	mg/kg dry	10	---	ND	---	---	---	30%	
Benzyl alcohol	0.159	0.0715	0.143	mg/kg dry	10	---	1.07	---	---	148	30%	
Isophorone	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	Q-52
Azobenzene (1,2-DPH)	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	0.286	0.571	mg/kg dry	10	---	ND	---	---	---	30%	
1,2-Dinitrobenzene	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
Pyridine	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 31 %		Limits: 37-122 %		Dilution: 10x		S-03				
2-Fluorobiphenyl (Surr)		36 %		44-115 %		"		S-03				
Phenol-d6 (Surr)		31 %		33-122 %		"		S-03				
p-Terphenyl-d14 (Surr)		74 %		54-127 %		"		S-03				
2-Fluorophenol (Surr)		33 %		35-115 %		"		S-03				
2,4,6-Tribromophenol (Surr)		73 %		39-132 %		"		S-03				

Matrix Spike (9080555-MS2)

Prepared: 08/01/19 15:37 Analyzed: 08/02/19 12:54

QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)**EPA 8270D**

Acenaphthene	0.479	0.00573	0.0115	mg/kg dry	4	0.575	ND	83	40-122%	---	---	
Acenaphthylene	0.504	0.00573	0.0115	mg/kg dry	4	0.575	ND	88	32-132%	---	---	
Anthracene	0.493	0.00573	0.0115	mg/kg dry	4	0.575	ND	86	47-123%	---	---	
Benz(a)anthracene	0.495	0.00573	0.0115	mg/kg dry	4	0.575	ND	86	49-126%	---	---	
Benzo(a)pyrene	0.512	0.00862	0.0172	mg/kg dry	4	0.575	ND	89	45-129%	---	---	
Benzo(b)fluoranthene	0.495	0.00862	0.0172	mg/kg dry	4	0.575	ND	86	45-132%	---	---	
Benzo(k)fluoranthene	0.512	0.00862	0.0172	mg/kg dry	4	0.575	ND	89	47-132%	---	---	
Benzo(g,h,i)perylene	0.493	0.00573	0.0115	mg/kg dry	4	0.575	ND	86	43-134%	---	---	
Chrysene	0.500	0.00573	0.0115	mg/kg dry	4	0.575	ND	87	50-124%	---	---	
Dibenz(a,h)anthracene	0.484	0.00573	0.0115	mg/kg dry	4	0.575	ND	84	45-134%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Matrix Spike (9080555-MS2)			Prepared: 08/01/19 15:37 Analyzed: 08/02/19 12:54									
QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)												
Fluoranthene	0.521	0.00573	0.0115	mg/kg dry	4	0.575	ND	91	50-127%	---	---	
Fluorene	0.483	0.00573	0.0115	mg/kg dry	4	0.575	ND	84	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.460	0.00573	0.0115	mg/kg dry	4	0.575	ND	80	45-133%	---	---	
1-Methylnaphthalene	0.459	0.0115	0.0230	mg/kg dry	4	0.575	ND	80	40-120%	---	---	
2-Methylnaphthalene	0.477	0.0115	0.0230	mg/kg dry	4	0.575	ND	83	38-122%	---	---	
Naphthalene	0.467	0.0115	0.0230	mg/kg dry	4	0.575	ND	81	35-123%	---	---	
Phenanthrene	0.499	0.00573	0.0115	mg/kg dry	4	0.575	ND	87	50-121%	---	---	
Pyrene	0.538	0.00573	0.0115	mg/kg dry	4	0.575	0.00640	92	47-127%	---	---	
Carbazole	0.521	0.00862	0.0172	mg/kg dry	4	0.575	ND	91	50-122%	---	---	
Dibenzofuran	0.479	0.00573	0.0115	mg/kg dry	4	0.575	ND	83	44-120%	---	---	
4-Chloro-3-methylphenol	0.483	0.0573	0.115	mg/kg dry	4	0.575	ND	84	45-122%	---	---	
2-Chlorophenol	0.449	0.0287	0.0573	mg/kg dry	4	0.575	ND	78	34-121%	---	---	
2,4-Dichlorophenol	0.535	0.0287	0.0573	mg/kg dry	4	0.575	ND	93	40-122%	---	---	
2,4-Dimethylphenol	0.445	0.0287	0.0573	mg/kg dry	4	0.575	ND	77	30-127%	---	---	
2,4-Dinitrophenol	0.402	0.144	0.287	mg/kg dry	4	0.575	ND	70	5-137%	---	---	
4,6-Dinitro-2-methylphenol	0.469	0.144	0.287	mg/kg dry	4	0.575	ND	82	29-132%	---	---	
2-Methylphenol	0.447	0.0144	0.0287	mg/kg dry	4	0.575	ND	78	32-122%	---	---	
3+4-Methylphenol(s)	0.463	0.0144	0.0287	mg/kg dry	4	0.575	ND	81	34-120%	---	---	
2-Nitrophenol	0.460	0.0573	0.115	mg/kg dry	4	0.575	ND	80	36-123%	---	---	
4-Nitrophenol	0.467	0.0573	0.115	mg/kg dry	4	0.575	ND	81	30-132%	---	---	
Pentachlorophenol (PCP)	0.492	0.0573	0.115	mg/kg dry	4	0.575	ND	86	25-133%	---	---	
Phenol	0.431	0.0115	0.0230	mg/kg dry	4	0.575	ND	75	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.490	0.0287	0.0573	mg/kg dry	4	0.575	ND	85	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.447	0.0287	0.0573	mg/kg dry	4	0.575	ND	78	40-120%	---	---	
2,4,5-Trichlorophenol	0.523	0.0287	0.0573	mg/kg dry	4	0.575	ND	91	41-124%	---	---	
2,4,6-Trichlorophenol	0.506	0.0287	0.0573	mg/kg dry	4	0.575	ND	88	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.529	0.0862	0.172	mg/kg dry	4	0.575	ND	92	51-133%	---	---	
Butyl benzyl phthalate	0.503	0.0573	0.115	mg/kg dry	4	0.575	ND	88	48-132%	---	---	
Diethylphthalate	0.500	0.0573	0.115	mg/kg dry	4	0.575	ND	87	50-124%	---	---	
Dimethylphthalate	0.476	0.0573	0.115	mg/kg dry	4	0.575	ND	83	48-124%	---	---	
Di-n-butylphthalate	0.526	0.0573	0.115	mg/kg dry	4	0.575	ND	92	51-128%	---	---	
Di-n-octyl phthalate	0.526	0.0573	0.115	mg/kg dry	4	0.575	ND	91	44-140%	---	---	
N-Nitrosodimethylamine	0.427	0.0144	0.0287	mg/kg dry	4	0.575	ND	74	23-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Matrix Spike (9080555-MS2)			Prepared: 08/01/19 15:37		Analyzed: 08/02/19 12:54							
QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)												
N-Nitroso-di-n-propylamine	0.418	0.0144	0.0287	mg/kg dry	4	0.575	ND	73	36-120%	---	---	
N-Nitrosodiphenylamine	0.504	0.0144	0.0287	mg/kg dry	4	0.575	ND	88	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.499	0.0144	0.0287	mg/kg dry	4	0.575	ND	87	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.411	0.0144	0.0287	mg/kg dry	4	0.575	ND	72	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.396	0.0144	0.0287	mg/kg dry	4	0.575	ND	69	33-131%	---	---	
Hexachlorobenzene	0.491	0.00573	0.0115	mg/kg dry	4	0.575	ND	85	44-122%	---	---	
Hexachlorobutadiene	0.469	0.0144	0.0287	mg/kg dry	4	0.575	ND	82	32-123%	---	---	
Hexachlorocyclopentadiene	0.495	0.0287	0.0573	mg/kg dry	4	0.575	ND	86	5-140%	---	---	
Hexachloroethane	0.488	0.0144	0.0287	mg/kg dry	4	0.575	ND	85	28-120%	---	---	
2-Chloronaphthalene	0.488	0.00573	0.0115	mg/kg dry	4	0.575	ND	85	41-120%	---	---	
1,2-Dichlorobenzene	0.433	0.0144	0.0287	mg/kg dry	4	0.575	ND	75	33-120%	---	---	
1,3-Dichlorobenzene	0.441	0.0144	0.0287	mg/kg dry	4	0.575	ND	77	30-120%	---	---	
1,4-Dichlorobenzene	0.444	0.0144	0.0287	mg/kg dry	4	0.575	ND	77	31-120%	---	---	
1,2,4-Trichlorobenzene	0.487	0.0144	0.0287	mg/kg dry	4	0.575	ND	85	34-120%	---	---	
4-Bromophenyl phenyl ether	0.492	0.0144	0.0287	mg/kg dry	4	0.575	ND	86	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.490	0.0144	0.0287	mg/kg dry	4	0.575	ND	85	45-121%	---	---	
Aniline	0.318	0.0287	0.0573	mg/kg dry	4	0.575	ND	55	7-120%	---	---	
4-Chloroaniline	0.383	0.0144	0.0287	mg/kg dry	4	0.575	ND	67	16-120%	---	---	
2-Nitroaniline	0.495	0.115	0.230	mg/kg dry	4	0.575	ND	86	44-127%	---	---	
3-Nitroaniline	0.375	0.115	0.230	mg/kg dry	4	0.575	ND	65	33-120%	---	---	
4-Nitroaniline	0.465	0.115	0.230	mg/kg dry	4	0.575	ND	81	35-120%	---	---	
Nitrobenzene	0.419	0.0573	0.115	mg/kg dry	4	0.575	ND	73	34-122%	---	---	
2,4-Dinitrotoluene	0.514	0.0573	0.115	mg/kg dry	4	0.575	ND	89	48-126%	---	---	
2,6-Dinitrotoluene	0.522	0.0573	0.115	mg/kg dry	4	0.575	ND	91	46-124%	---	---	
Benzoic acid	0.580	0.431	0.431	mg/kg dry	4	1.15	ND	50	5-140%	---	---	
Benzyl alcohol	0.432	0.0287	0.0573	mg/kg dry	4	0.575	ND	75	29-122%	---	---	
Isophorone	0.465	0.0144	0.0287	mg/kg dry	4	0.575	ND	81	30-122%	---	---	
Azobenzene (1,2-DPH)	0.479	0.0144	0.0287	mg/kg dry	4	0.575	ND	83	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.515	0.144	0.287	mg/kg dry	4	0.575	ND	90	60-121%	---	---	
3,3'-Dichlorobenzidine	1.81	0.115	0.230	mg/kg dry	4	1.15	ND	158	22-121%	---	---	Q-01, Q-41
1,2-Dinitrobenzene	0.475	0.144	0.287	mg/kg dry	4	0.575	ND	83	44-120%	---	---	
1,3-Dinitrobenzene	0.477	0.144	0.287	mg/kg dry	4	0.575	ND	83	42-127%	---	---	
1,4-Dinitrobenzene	0.463	0.144	0.287	mg/kg drv	4	0.575	ND	81	37-132%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Matrix Spike (9080555-MS2)				Prepared: 08/01/19 15:37 Analyzed: 08/02/19 12:54								
QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)												
Pyridine	0.305	0.0287	0.0573	mg/kg dry	4	0.575	ND	53	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 65 %		Limits: 37-122 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		79 %		44-115 %		"						
Phenol-d6 (Surr)		72 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		84 %		54-127 %		"						
2-Fluorophenol (Surr)		68 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		89 %		39-132 %		"						

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071299 - EPA 3051A						Soil						
Blank (9071299-BLK1)			Prepared: 07/25/19 14:44		Analyzed: 07/30/19 17:40							
EPA 6020A												
Antimony	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	0.0385	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Nickel	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	1.92	3.85	mg/kg wet	10	---	---	---	---	---	---	

LCS (9071299-BS1)

Prepared: 07/25/19 14:44 Analyzed: 07/30/19 17:59

EPA 6020A												
Antimony	26.5	0.500	1.00	mg/kg wet	10	25.0	---	106	80-120%	---	---	
Arsenic	50.4	0.500	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Barium	50.8	0.500	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Beryllium	24.7	0.100	0.200	mg/kg wet	10	25.0	---	99	80-120%	---	---	
Cadmium	53.9	0.100	0.200	mg/kg wet	10	50.0	---	108	80-120%	---	---	
Chromium	50.1	0.500	1.00	mg/kg wet	10	50.0	---	100	80-120%	---	---	
Copper	50.7	0.500	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Lead	54.1	0.100	0.200	mg/kg wet	10	50.0	---	108	80-120%	---	---	
Mercury	0.987	0.0400	0.0800	mg/kg wet	10	1.00	---	99	80-120%	---	---	
Nickel	49.7	0.500	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Selenium	25.2	0.500	1.00	mg/kg wet	10	25.0	---	101	80-120%	---	---	
Silver	26.8	0.100	0.200	mg/kg wet	10	25.0	---	107	80-120%	---	---	
Thallium	25.7	0.100	0.200	mg/kg wet	10	25.0	---	103	80-120%	---	---	
Zinc	50.0	2.00	4.00	mg/kg wet	10	50.0	---	100	80-120%	---	---	

Duplicate (9071299-DUP1)

Prepared: 07/25/19 14:44 Analyzed: 07/30/19 18:21

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071299 - EPA 3051A												Soil
Duplicate (9071299-DUP1)												Prepared: 07/25/19 14:44 Analyzed: 07/30/19 18:21
QC Source Sample: DP-2(11-12.5) (A9G0676-06)												
EPA 6020A												
Antimony	ND	0.594	1.19	mg/kg dry	10	---	ND	---	---	---	40%	
Arsenic	2.64	0.594	1.19	mg/kg dry	10	---	2.56	---	---	3	40%	
Barium	66.5	0.594	1.19	mg/kg dry	10	---	61.4	---	---	8	40%	
Beryllium	0.229	0.119	0.237	mg/kg dry	10	---	0.251	---	---	9	40%	J
Cadmium	0.352	0.119	0.237	mg/kg dry	10	---	0.357	---	---	1	40%	
Chromium	8.99	0.594	1.19	mg/kg dry	10	---	9.23	---	---	3	40%	
Copper	12.0	0.594	1.19	mg/kg dry	10	---	12.4	---	---	4	40%	
Lead	2.94	0.119	0.237	mg/kg dry	10	---	2.17	---	---	30	40%	
Mercury	ND	0.0475	0.0950	mg/kg dry	10	---	ND	---	---	---	40%	
Nickel	13.2	0.594	1.19	mg/kg dry	10	---	14.5	---	---	9	40%	
Selenium	ND	0.594	1.19	mg/kg dry	10	---	ND	---	---	---	40%	
Silver	ND	0.119	0.237	mg/kg dry	10	---	ND	---	---	---	40%	
Thallium	ND	0.119	0.237	mg/kg dry	10	---	ND	---	---	---	40%	
Zinc	33.7	2.37	4.75	mg/kg dry	10	---	35.0	---	---	4	40%	

Matrix Spike (9071299-MS1)

Prepared: 07/25/19 14:44 Analyzed: 07/30/19 18:26

QC Source Sample: DP-2(11-12.5) (A9G0676-06)

EPA 6020A												
Antimony	24.3	0.533	1.07	mg/kg dry	10	26.7	ND	91	75-125%	---	---	
Arsenic	53.8	0.533	1.07	mg/kg dry	10	53.3	2.56	96	75-125%	---	---	
Barium	147	0.533	1.07	mg/kg dry	10	53.3	61.4	161	75-125%	---	---	A-01b, Q-01
Beryllium	26.0	0.107	0.213	mg/kg dry	10	26.7	0.251	97	75-125%	---	---	
Cadmium	55.1	0.107	0.213	mg/kg dry	10	53.3	0.357	103	75-125%	---	---	
Chromium	60.2	0.533	1.07	mg/kg dry	10	53.3	9.23	96	75-125%	---	---	
Copper	64.2	0.533	1.07	mg/kg dry	10	53.3	12.4	97	75-125%	---	---	
Lead	56.4	0.107	0.213	mg/kg dry	10	53.3	2.17	102	75-125%	---	---	
Mercury	0.994	0.0427	0.0853	mg/kg dry	10	1.07	ND	93	75-125%	---	---	
Nickel	65.7	0.533	1.07	mg/kg dry	10	53.3	14.5	96	75-125%	---	---	
Selenium	24.6	0.533	1.07	mg/kg dry	10	26.7	ND	92	75-125%	---	---	
Silver	27.0	0.107	0.213	mg/kg dry	10	26.7	ND	101	75-125%	---	---	
Thallium	25.4	0.107	0.213	mg/kg dry	10	26.7	ND	95	75-125%	---	---	
Zinc	83.9	2.13	4.27	mg/kg dry	10	53.3	35.0	92	75-125%	---	---	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071299 - EPA 3051A							Soil					

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081214 - EPA 3051A						Soil						
Blank (9081214-BLK1)			Prepared: 08/21/19 13:08		Analyzed: 08/22/19 19:34							
EPA 6020A												
Antimony	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	0.0385	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Nickel	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	1.92	3.85	mg/kg wet	10	---	---	---	---	---	---	

LCS (9081214-BS1)

Prepared: 08/21/19 13:08 Analyzed: 08/22/19 19:42

EPA 6020A												
Antimony	26.9	0.500	1.00	mg/kg wet	10	25.0	---	108	80-120%	---	---	
Arsenic	52.5	0.500	1.00	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Beryllium	26.6	0.100	0.200	mg/kg wet	10	25.0	---	106	80-120%	---	---	
Cadmium	53.2	0.100	0.200	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Chromium	51.6	0.500	1.00	mg/kg wet	10	50.0	---	103	80-120%	---	---	
Copper	55.6	0.500	1.00	mg/kg wet	10	50.0	---	111	80-120%	---	---	
Lead	53.2	0.100	0.200	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Mercury	1.05	0.0400	0.0800	mg/kg wet	10	1.00	---	105	80-120%	---	---	
Nickel	55.9	0.500	1.00	mg/kg wet	10	50.0	---	112	80-120%	---	---	
Selenium	25.8	0.500	1.00	mg/kg wet	10	25.0	---	103	80-120%	---	---	
Silver	28.2	0.100	0.200	mg/kg wet	10	25.0	---	113	80-120%	---	---	
Thallium	26.6	0.100	0.200	mg/kg wet	10	25.0	---	106	80-120%	---	---	
Zinc	54.9	2.00	4.00	mg/kg wet	10	50.0	---	110	80-120%	---	---	

Duplicate (9081214-DUP1)

Prepared: 08/21/19 13:08 Analyzed: 08/22/19 20:04

QC Source Sample: Non-SDG (A9H0576-16)

Antimony	ND	0.601	1.20	mg/kg dry	10	---	ND	---	---	---	40%	

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081214 - EPA 3051A						Soil						
Duplicate (9081214-DUP1)			Prepared: 08/21/19 13:08 Analyzed: 08/22/19 20:04									
QC Source Sample: Non-SDG (A9H0576-16)												
Arsenic	8.37	0.601	1.20	mg/kg dry	10	---	7.33	---	---	13	40%	
Beryllium	0.242	0.120	0.241	mg/kg dry	10	---	0.237	---	---	2	40%	
Cadmium	ND	0.120	0.241	mg/kg dry	10	---	ND	---	---	---	40%	
Chromium	28.6	0.601	1.20	mg/kg dry	10	---	24.9	---	---	14	40%	
Copper	39.6	0.601	1.20	mg/kg dry	10	---	33.6	---	---	16	40%	
Lead	10.2	0.120	0.241	mg/kg dry	10	---	10.1	---	---	0.8	40%	
Mercury	0.0927	0.0481	0.0962	mg/kg dry	10	---	0.0979	---	---	5	40%	
Nickel	31.4	0.601	1.20	mg/kg dry	10	---	23.1	---	---	30	40%	
Selenium	ND	0.601	1.20	mg/kg dry	10	---	ND	---	---	---	40%	
Silver	ND	0.120	0.241	mg/kg dry	10	---	ND	---	---	---	40%	
Thallium	ND	0.120	0.241	mg/kg dry	10	---	ND	---	---	---	40%	
Zinc	48.3	2.41	4.81	mg/kg dry	10	---	47.7	---	---	1	40%	

Matrix Spike (9081214-MS1)

Prepared: 08/21/19 13:08 Analyzed: 08/22/19 20:08

QC Source Sample: Non-SDG (A9H0576-16)**EPA 6020A**

Antimony	29.0	0.607	1.21	mg/kg dry	10	30.4	ND	95	75-125%	---	---	
Arsenic	70.0	0.607	1.21	mg/kg dry	10	60.7	7.33	103	75-125%	---	---	
Beryllium	33.1	0.121	0.243	mg/kg dry	10	30.4	0.237	108	75-125%	---	---	
Cadmium	65.5	0.121	0.243	mg/kg dry	10	60.7	ND	108	75-125%	---	---	
Chromium	84.3	0.607	1.21	mg/kg dry	10	60.7	24.9	98	75-125%	---	---	
Copper	95.5	0.607	1.21	mg/kg dry	10	60.7	33.6	102	75-125%	---	---	
Lead	74.9	0.121	0.243	mg/kg dry	10	60.7	10.1	107	75-125%	---	---	
Mercury	1.39	0.0486	0.0972	mg/kg dry	10	1.21	0.0979	107	75-125%	---	---	
Nickel	87.6	0.607	1.21	mg/kg dry	10	60.7	23.1	106	75-125%	---	---	
Selenium	31.1	0.607	1.21	mg/kg dry	10	30.4	ND	102	75-125%	---	---	
Silver	34.4	0.121	0.243	mg/kg dry	10	30.4	ND	113	75-125%	---	---	
Thallium	32.3	0.121	0.243	mg/kg dry	10	30.4	ND	106	75-125%	---	---	
Zinc	109	2.43	4.86	mg/kg dry	10	60.7	47.7	101	75-125%	---	---	

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Philip Nerenberg, Lab Director

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9450 SW Commerce Circle
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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071168 - Total Solids (Dry Weight)						Soil						
Duplicate (9071168-DUP1)			Prepared: 07/23/19 08:16 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0357-06)												
% Solids	80.3	1.00	1.00	% by Weight	1	---	80.3	---	---	0.04	10%	
Duplicate (9071168-DUP2)			Prepared: 07/23/19 08:16 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0689-06)												
% Solids	88.6	1.00	1.00	% by Weight	1	---	88.8	---	---	0.1	10%	
Duplicate (9071168-DUP3)			Prepared: 07/23/19 15:51 Analyzed: 07/24/19 08:52									
QC Source Sample: DP-8(11.5-13) (A9G0676-28)												
EPA 8000C												
% Solids	92.5	1.00	1.00	% by Weight	1	---	92.4	---	---	0.1	10%	
Duplicate (9071168-DUP4)			Prepared: 07/23/19 15:51 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0703-05)												
% Solids	79.7	1.00	1.00	% by Weight	1	---	80.4	---	---	0.9	10%	
Duplicate (9071168-DUP5)			Prepared: 07/23/19 15:51 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0703-08)												
% Solids	80.1	1.00	1.00	% by Weight	1	---	80.3	---	---	0.2	10%	
Duplicate (9071168-DUP6)			Prepared: 07/23/19 19:17 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0720-04)												
% Solids	74.5	1.00	1.00	% by Weight	1	---	74.6	---	---	0.2	10%	
Duplicate (9071168-DUP7)			Prepared: 07/23/19 19:17 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0727-01)												
% Solids	84.4	1.00	1.00	% by Weight	1	---	79.8	---	---	6	10%	
Duplicate (9071168-DUP8)			Prepared: 07/23/19 19:17 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0730-04)												
% Solids	80.8	1.00	1.00	% by Weight	1	---	80.0	---	---	1	10%	

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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 9071168 - Total Solids (Dry Weight)							Soil					

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

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080517 - Total Solids (Dry Weight)							Soil					
Duplicate (9080517-DUP1)			Prepared: 08/01/19 08:45		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9G0972-11)												
% Solids	89.4	1.00	1.00	% by Weight	1	---	89.1	---	---	0.3	10%	
Duplicate (9080517-DUP2)			Prepared: 08/01/19 08:45		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9G0976-09)												
% Solids	88.3	1.00	1.00	% by Weight	1	---	88.4	---	---	0.1	10%	
Duplicate (9080517-DUP3)			Prepared: 08/01/19 08:45		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9G0983-08)												
% Solids	81.0	1.00	1.00	% by Weight	1	---	81.3	---	---	0.3	10%	
Duplicate (9080517-DUP4)			Prepared: 08/01/19 19:11		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9H0029-01)												
% Solids	78.4	1.00	1.00	% by Weight	1	---	78.1	---	---	0.4	10%	
Duplicate (9080517-DUP5)			Prepared: 08/01/19 19:13		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9H0031-03)												
% Solids	79.3	1.00	1.00	% by Weight	1	---	78.9	---	---	0.5	10%	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080572 - Total Solids (Dry Weight)							Soil					
Duplicate (9080572-DUP1)			Prepared: 08/02/19 08:52		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0009-02)												
% Solids	93.0	1.00	1.00	% by Weight	1	---	93.2	---	---	0.2	10%	
Duplicate (9080572-DUP2)			Prepared: 08/02/19 08:52		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0020-06)												
% Solids	74.7	1.00	1.00	% by Weight	1	---	74.4	---	---	0.4	10%	
Duplicate (9080572-DUP3)			Prepared: 08/02/19 08:52		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0037-09)												
% Solids	96.5	1.00	1.00	% by Weight	1	---	96.6	---	---	0.1	10%	
Duplicate (9080572-DUP4)			Prepared: 08/02/19 18:29		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9G0808-67)												
% Solids	95.3	1.00	1.00	% by Weight	1	---	95.4	---	---	0.1	10%	
Duplicate (9080572-DUP5)			Prepared: 08/02/19 18:29		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0074-03)												
% Solids	76.7	1.00	1.00	% by Weight	1	---	76.3	---	---	0.5	10%	

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

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080640 - Total Solids (Dry Weight)							Soil					
Duplicate (9080640-DUP1)			Prepared: 08/05/19 13:56		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0042-01)												
% Solids	77.5	1.00	1.00	% by Weight	1	---	77.7	---	---	0.2	10%	
Duplicate (9080640-DUP2)			Prepared: 08/05/19 13:56		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0088-01)												
% Solids	74.1	1.00	1.00	% by Weight	1	---	73.7	---	---	0.5	10%	
Duplicate (9080640-DUP4)			Prepared: 08/05/19 18:28		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0017-61)												
% Solids	96.6	1.00	1.00	% by Weight	1	---	96.2	---	---	0.5	10%	
Duplicate (9080640-DUP5)			Prepared: 08/05/19 18:28		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0125-06)												
% Solids	76.2	1.00	1.00	% by Weight	1	---	74.9	---	---	2	10%	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****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 9080658 - Total Solids (Dry Weight)							Soil					
Duplicate (9080658-DUP1)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: DP-11(16.5-18) (A9G0676-40)</u>												
<u>EPA 8000C</u>												
% Solids	89.5	1.00	1.00	% by Weight	1	---	89.4	---	---	0.1	10%	
Duplicate (9080658-DUP2)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0052-10)</u>												
% Solids	89.1	1.00	1.00	% by Weight	1	---	89.0	---	---	0.1	10%	
Duplicate (9080658-DUP3)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0120-09)</u>												
% Solids	75.1	1.00	1.00	% by Weight	1	---	75.2	---	---	0.09	10%	
Duplicate (9080658-DUP4)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0120-19)</u>												
% Solids	77.9	1.00	1.00	% by Weight	1	---	78.3	---	---	0.6	10%	
Duplicate (9080658-DUP5)			Prepared: 08/06/19 18:37 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0148-03)</u>												
% Solids	73.5	1.00	1.00	% by Weight	1	---	73.6	---	---	0.2	10%	
Duplicate (9080658-DUP6)			Prepared: 08/06/19 18:37 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0154-02)</u>												
% Solids	83.4	1.00	1.00	% by Weight	1	---	82.3	---	---	1	10%	
Duplicate (9080658-DUP7)			Prepared: 08/06/19 18:37 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0155-02)</u>												
% Solids	92.0	1.00	1.00	% by Weight	1	---	91.7	---	---	0.3	10%	

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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: 9071293							
A9G0676-02	Soil	NWTPH-Dx	07/18/19 10:32	07/25/19 12:58	10.04g/5mL	10g/5mL	1.00
A9G0676-06	Soil	NWTPH-Dx	07/18/19 11:15	07/25/19 12:58	11.33g/5mL	10g/5mL	0.88
A9G0676-08	Soil	NWTPH-Dx	07/18/19 11:35	07/25/19 12:58	11.38g/5mL	10g/5mL	0.88
A9G0676-10	Soil	NWTPH-Dx	07/18/19 12:00	07/25/19 12:58	11.08g/5mL	10g/5mL	0.90
A9G0676-13	Soil	NWTPH-Dx	07/19/19 08:25	07/25/19 12:58	11.15g/5mL	10g/5mL	0.90
A9G0676-16	Soil	NWTPH-Dx	07/19/19 08:55	07/25/19 12:58	10.17g/5mL	10g/5mL	0.98
A9G0676-20	Soil	NWTPH-Dx	07/19/19 09:20	07/25/19 12:58	11.12g/5mL	10g/5mL	0.90
A9G0676-24	Soil	NWTPH-Dx	07/19/19 09:40	07/25/19 12:58	10.35g/5mL	10g/5mL	0.97
A9G0676-28	Soil	NWTPH-Dx	07/19/19 09:58	07/25/19 12:58	10.76g/5mL	10g/5mL	0.93
A9G0676-32	Soil	NWTPH-Dx	07/19/19 10:20	07/25/19 12:58	10.32g/5mL	10g/5mL	0.97
A9G0676-35	Soil	NWTPH-Dx	07/19/19 10:35	07/25/19 12:58	11.08g/5mL	10g/5mL	0.90
A9G0676-38	Soil	NWTPH-Dx	07/19/19 10:50	07/25/19 12:58	10.15g/5mL	10g/5mL	0.99
A9G0676-42	Soil	NWTPH-Dx	07/19/19 11:15	07/25/19 12:58	10.26g/5mL	10g/5mL	0.98
A9G0676-46RE1	Soil	NWTPH-Dx	07/19/19 11:35	07/25/19 12:58	10.36g/5mL	10g/5mL	0.97
Batch: 9080541							
A9G0676-09	Soil	NWTPH-Dx	07/18/19 11:40	08/01/19 12:56	11.62g/5mL	10g/5mL	0.86
A9G0676-39	Soil	NWTPH-Dx	07/19/19 10:55	08/01/19 12:56	10.16g/5mL	10g/5mL	0.98
A9G0676-43	Soil	NWTPH-Dx	07/19/19 11:20	08/01/19 12:56	10.89g/5mL	10g/5mL	0.92
A9G0676-47	Soil	NWTPH-Dx	07/19/19 11:40	08/01/19 12:56	10.62g/5mL	10g/5mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071206							
A9G0676-02	Soil	NWTPH-Gx (MS)	07/18/19 10:32	07/18/19 10:32	5.06g/5mL	5g/5mL	0.99
A9G0676-06	Soil	NWTPH-Gx (MS)	07/18/19 11:15	07/18/19 11:15	4.76g/5mL	5g/5mL	1.05
A9G0676-08	Soil	NWTPH-Gx (MS)	07/18/19 11:35	07/18/19 11:35	5.37g/5mL	5g/5mL	0.93
A9G0676-10	Soil	NWTPH-Gx (MS)	07/18/19 12:00	07/18/19 12:00	5.17g/5mL	5g/5mL	0.97
A9G0676-13	Soil	NWTPH-Gx (MS)	07/19/19 08:25	07/19/19 08:25	5.28g/5mL	5g/5mL	0.95
A9G0676-16	Soil	NWTPH-Gx (MS)	07/19/19 08:55	07/19/19 08:55	4.64g/5mL	5g/5mL	1.08
A9G0676-20	Soil	NWTPH-Gx (MS)	07/19/19 09:20	07/19/19 09:20	5.27g/5mL	5g/5mL	0.95
A9G0676-24	Soil	NWTPH-Gx (MS)	07/19/19 09:40	07/19/19 09:40	5.57g/5mL	5g/5mL	0.90
A9G0676-28	Soil	NWTPH-Gx (MS)	07/19/19 09:58	07/19/19 09:58	4.82g/5mL	5g/5mL	1.04
A9G0676-32	Soil	NWTPH-Gx (MS)	07/19/19 10:20	07/19/19 10:20	4.67g/5mL	5g/5mL	1.07
A9G0676-42	Soil	NWTPH-Gx (MS)	07/19/19 11:15	07/19/19 11:15	5.26g/5mL	5g/5mL	0.95

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
A9G0676-46	Soil	NWTPH-Gx (MS)	07/19/19 11:35	07/19/19 11:35	5.21g/5mL	5g/5mL	0.96
Batch: 9071232							
A9G0676-35	Soil	NWTPH-Gx (MS)	07/19/19 10:35	07/19/19 10:35	4.9g/5mL	5g/5mL	1.02
A9G0676-38	Soil	NWTPH-Gx (MS)	07/19/19 10:50	07/19/19 10:50	4.61g/5mL	5g/5mL	1.08
Batch: 9080584							
A9G0676-39RE1	Soil	NWTPH-Gx (MS)	07/19/19 10:55	07/19/19 10:55	5.56g/5mL	5g/5mL	0.90
A9G0676-43RE1	Soil	NWTPH-Gx (MS)	07/19/19 11:20	07/19/19 11:20	4.96g/5mL	5g/5mL	1.01
A9G0676-47	Soil	NWTPH-Gx (MS)	07/19/19 11:40	07/19/19 11:40	4.32g/5mL	5g/5mL	1.16

Volatile Organic Compounds by EPA 5035A/8260C**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071206							
A9G0676-02	Soil	5035A/8260C	07/18/19 10:32	07/18/19 10:32	5.06g/5mL	5g/5mL	0.99
A9G0676-06	Soil	5035A/8260C	07/18/19 11:15	07/18/19 11:15	4.76g/5mL	5g/5mL	1.05
A9G0676-08	Soil	5035A/8260C	07/18/19 11:35	07/18/19 11:35	5.37g/5mL	5g/5mL	0.93
A9G0676-10	Soil	5035A/8260C	07/18/19 12:00	07/18/19 12:00	5.17g/5mL	5g/5mL	0.97
A9G0676-13	Soil	5035A/8260C	07/19/19 08:25	07/19/19 08:25	5.28g/5mL	5g/5mL	0.95
A9G0676-16	Soil	5035A/8260C	07/19/19 08:55	07/19/19 08:55	4.64g/5mL	5g/5mL	1.08
A9G0676-17	Soil	5035A/8260C	07/19/19 09:00	07/19/19 09:00	4.78g/5mL	5g/5mL	1.05
A9G0676-20	Soil	5035A/8260C	07/19/19 09:20	07/19/19 09:20	5.27g/5mL	5g/5mL	0.95
A9G0676-24	Soil	5035A/8260C	07/19/19 09:40	07/19/19 09:40	5.57g/5mL	5g/5mL	0.90
A9G0676-28	Soil	5035A/8260C	07/19/19 09:58	07/19/19 09:58	4.82g/5mL	5g/5mL	1.04
A9G0676-32	Soil	5035A/8260C	07/19/19 10:20	07/19/19 10:20	4.67g/5mL	5g/5mL	1.07
A9G0676-42	Soil	5035A/8260C	07/19/19 11:15	07/19/19 11:15	5.26g/5mL	5g/5mL	0.95
A9G0676-46	Soil	5035A/8260C	07/19/19 11:35	07/19/19 11:35	5.21g/5mL	5g/5mL	0.96
Batch: 9071232							
A9G0676-35	Soil	5035A/8260C	07/19/19 10:35	07/19/19 10:35	4.9g/5mL	5g/5mL	1.02
A9G0676-38	Soil	5035A/8260C	07/19/19 10:50	07/19/19 10:50	4.61g/5mL	5g/5mL	1.08
Batch: 9080523							
A9G0676-09	Soil	5035A/8260C	07/18/19 11:40	07/18/19 11:40	5.91g/5mL	5g/5mL	0.85
Batch: 9080584							
A9G0676-39RE1	Soil	5035A/8260C	07/19/19 10:55	07/19/19 10:55	5.56g/5mL	5g/5mL	0.90
A9G0676-43RE1	Soil	5035A/8260C	07/19/19 11:20	07/19/19 11:20	4.96g/5mL	5g/5mL	1.01

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****SAMPLE PREPARATION INFORMATION****Volatile Organic Compounds by EPA 5035A/8260C****Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9G0676-47	Soil	5035A/8260C	07/19/19 11:40	07/19/19 11:40	4.32g/5mL	5g/5mL	1.16

Polychlorinated Biphenyls by EPA 8082A**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071261							
A9G0676-02	Soil	EPA 8082A	07/18/19 10:32	07/25/19 07:05	10.3g/5mL	10g/5mL	0.97
A9G0676-06	Soil	EPA 8082A	07/18/19 11:15	07/25/19 07:05	10.01g/5mL	10g/5mL	1.00
A9G0676-08	Soil	EPA 8082A	07/18/19 11:35	07/25/19 07:05	10.23g/5mL	10g/5mL	0.98
A9G0676-10	Soil	EPA 8082A	07/18/19 12:00	07/25/19 07:05	10.37g/5mL	10g/5mL	0.96
A9G0676-13	Soil	EPA 8082A	07/19/19 08:25	07/25/19 07:05	10.15g/5mL	10g/5mL	0.99
A9G0676-16	Soil	EPA 8082A	07/19/19 08:55	07/25/19 07:05	10.34g/5mL	10g/5mL	0.97
A9G0676-20	Soil	EPA 8082A	07/19/19 09:20	07/25/19 07:05	10.1g/5mL	10g/5mL	0.99
A9G0676-24	Soil	EPA 8082A	07/19/19 09:40	07/25/19 07:05	10.03g/5mL	10g/5mL	1.00
A9G0676-28	Soil	EPA 8082A	07/19/19 09:58	07/25/19 07:05	10.32g/5mL	10g/5mL	0.97
A9G0676-32	Soil	EPA 8082A	07/19/19 10:20	07/25/19 07:05	10.22g/5mL	10g/5mL	0.98
A9G0676-35	Soil	EPA 8082A	07/19/19 10:35	07/25/19 07:05	10.03g/5mL	10g/5mL	1.00
A9G0676-38RE1	Soil	EPA 8082A	07/19/19 10:50	07/25/19 07:05	10.06g/5mL	10g/5mL	0.99
A9G0676-42RE1	Soil	EPA 8082A	07/19/19 11:15	07/25/19 07:05	10.13g/5mL	10g/5mL	0.99
A9G0676-46	Soil	EPA 8082A	07/19/19 11:35	07/25/19 07:05	10.08g/5mL	10g/5mL	0.99
Batch: 9081235							
A9G0676-39	Soil	EPA 8082A	07/19/19 10:55	08/22/19 06:48	10.59g/2mL	10g/2mL	0.94
A9G0676-43	Soil	EPA 8082A	07/19/19 11:20	08/22/19 06:48	10.78g/2mL	10g/2mL	0.93
A9G0676-47	Soil	EPA 8082A	07/19/19 11:40	08/22/19 06:48	10.07g/2mL	10g/2mL	0.99

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071207							
A9G0676-02	Soil	EPA 8270D (SIM)	07/18/19 10:32	07/24/19 07:01	10.14g/5mL	10g/5mL	0.99
A9G0676-06	Soil	EPA 8270D (SIM)	07/18/19 11:15	07/24/19 07:01	10.13g/5mL	10g/5mL	0.99
A9G0676-10	Soil	EPA 8270D (SIM)	07/18/19 12:00	07/24/19 07:01	10.06g/5mL	10g/5mL	0.99
A9G0676-16	Soil	EPA 8270D (SIM)	07/19/19 08:55	07/24/19 07:01	10.15g/5mL	10g/5mL	0.99

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****SAMPLE PREPARATION INFORMATION****Semivolatile Organic Compounds by EPA 8270D****Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071408							
A9G0676-35RE2	Soil	EPA 8270D	07/19/19 10:35	07/30/19 13:20	15.65g/2mL	15g/2mL	0.96
A9G0676-38	Soil	EPA 8270D	07/19/19 10:50	07/30/19 13:20	15.27g/2mL	15g/2mL	0.98
A9G0676-42	Soil	EPA 8270D	07/19/19 11:15	07/30/19 13:20	15.66g/5mL	15g/2mL	2.39
A9G0676-46	Soil	EPA 8270D	07/19/19 11:35	07/30/19 13:20	15.03g/2mL	15g/2mL	1.00
Batch: 9080555							
A9G0676-08RE1	Soil	EPA 8270D	07/18/19 11:35	08/01/19 16:17	15.22g/2mL	15g/2mL	0.99
A9G0676-09RE1	Soil	EPA 8270D	07/18/19 11:40	08/01/19 16:17	15.26g/2mL	15g/2mL	0.98
A9G0676-39RE1	Soil	EPA 8270D	07/19/19 10:55	08/01/19 16:17	15.26g/2mL	15g/2mL	0.98
A9G0676-43RE1	Soil	EPA 8270D	07/19/19 11:20	08/01/19 16:17	15.87g/2mL	15g/2mL	0.95
A9G0676-47RE2	Soil	EPA 8270D	07/19/19 11:40	08/01/19 16:17	15.59g/2mL	15g/2mL	0.96

Total Metals by EPA 6020A (ICPMS)**Prep: EPA 3051A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071299							
A9G0676-02	Soil	EPA 6020A	07/18/19 10:32	07/25/19 14:44	0.493g/50mL	0.5g/50mL	1.01
A9G0676-06	Soil	EPA 6020A	07/18/19 11:15	07/25/19 14:44	0.495g/50mL	0.5g/50mL	1.01
A9G0676-10	Soil	EPA 6020A	07/18/19 12:00	07/25/19 14:44	0.484g/50mL	0.5g/50mL	1.03
A9G0676-13	Soil	EPA 6020A	07/19/19 08:25	07/25/19 14:44	0.507g/50mL	0.5g/50mL	0.99
A9G0676-16	Soil	EPA 6020A	07/19/19 08:55	07/25/19 14:44	0.465g/50mL	0.5g/50mL	1.08
A9G0676-35	Soil	EPA 6020A	07/19/19 10:35	07/25/19 14:44	0.459g/50mL	0.5g/50mL	1.09
A9G0676-38	Soil	EPA 6020A	07/19/19 10:50	07/25/19 14:44	0.499g/50mL	0.5g/50mL	1.00
A9G0676-38RE1	Soil	EPA 6020A	07/19/19 10:50	07/25/19 14:44	0.499g/50mL	0.5g/50mL	1.00
A9G0676-42	Soil	EPA 6020A	07/19/19 11:15	07/25/19 14:44	0.5g/50mL	0.5g/50mL	1.00
A9G0676-42RE1	Soil	EPA 6020A	07/19/19 11:15	07/25/19 14:44	0.5g/50mL	0.5g/50mL	1.00
A9G0676-46	Soil	EPA 6020A	07/19/19 11:35	07/25/19 14:44	0.508g/50mL	0.5g/50mL	0.98
A9G0676-46RE1	Soil	EPA 6020A	07/19/19 11:35	07/25/19 14:44	0.508g/50mL	0.5g/50mL	0.98
Batch: 9081214							
A9G0676-39	Soil	EPA 6020A	07/19/19 10:55	08/21/19 13:08	0.468g/50mL	0.5g/50mL	1.07
A9G0676-43	Soil	EPA 6020A	07/19/19 11:20	08/21/19 13:08	0.489g/50mL	0.5g/50mL	1.02
A9G0676-47	Soil	EPA 6020A	07/19/19 11:40	08/21/19 13:08	0.471g/50mL	0.5g/50mL	1.06

Percent Dry Weight

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
Batch: 9071168							
A9G0676-02	Soil	EPA 8000C	07/18/19 10:32	07/23/19 15:51			NA
A9G0676-06	Soil	EPA 8000C	07/18/19 11:15	07/23/19 15:51			NA
A9G0676-08	Soil	EPA 8000C	07/18/19 11:35	07/23/19 15:51			NA
A9G0676-10	Soil	EPA 8000C	07/18/19 12:00	07/23/19 15:51			NA
A9G0676-13	Soil	EPA 8000C	07/19/19 08:25	07/23/19 15:51			NA
A9G0676-16	Soil	EPA 8000C	07/19/19 08:55	07/23/19 15:51			NA
A9G0676-17	Soil	EPA 8000C	07/19/19 09:00	07/23/19 15:51			NA
A9G0676-20	Soil	EPA 8000C	07/19/19 09:20	07/23/19 15:51			NA
A9G0676-24	Soil	EPA 8000C	07/19/19 09:40	07/23/19 15:51			NA
A9G0676-28	Soil	EPA 8000C	07/19/19 09:58	07/23/19 15:51			NA
A9G0676-32	Soil	EPA 8000C	07/19/19 10:20	07/23/19 15:51			NA
A9G0676-35	Soil	EPA 8000C	07/19/19 10:35	07/23/19 15:51			NA
A9G0676-38	Soil	EPA 8000C	07/19/19 10:50	07/23/19 15:51			NA
A9G0676-42	Soil	EPA 8000C	07/19/19 11:15	07/23/19 15:51			NA
A9G0676-46	Soil	EPA 8000C	07/19/19 11:35	07/23/19 15:51			NA
Batch: 9080517							
A9G0676-09	Soil	EPA 8000C	07/18/19 11:40	08/01/19 19:11			NA
A9G0676-47	Soil	EPA 8000C	07/19/19 11:40	08/01/19 19:11			NA
Batch: 9080572							
A9G0676-37	Soil	EPA 8000C	07/19/19 10:45	08/02/19 18:29			NA
A9G0676-39	Soil	EPA 8000C	07/19/19 10:55	08/02/19 18:29			NA
A9G0676-44	Soil	EPA 8000C	07/19/19 11:25	08/02/19 18:29			NA
Batch: 9080640							
A9G0676-43	Soil	EPA 8000C	07/19/19 11:20	08/05/19 13:56			NA
Batch: 9080658							
A9G0676-40	Soil	EPA 8000C	07/19/19 11:00	08/06/19 09:58			NA

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALIFIER DEFINITIONS

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

Apex Laboratories

- A-01** Matrix Spike results for this extraction batch are not reported due to instrument malfunction. Batch is accepted based on results of the Blank Spike/Dup.
- A-01a** Reporting limit raised due to possible lab contamination.
- A-01b** Serial dilution performed and meets acceptance criteria. Data is 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-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 due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
- H-06** This sample was received, or the analysis requested, outside the recommended holding time.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- P-10** Result estimated due to the presence of multiple PCB Aroclors and/or matrix interference.
- 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-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 erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +0.7%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +0.8%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +1.1%. The results are reported as Estimated Values.

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +104%. 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 8260C/8270D by +11.3%. 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 8260C/8270D by +15.4%. 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 8260C/8270D by +2.2%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +2.5%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +20.1%. 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 8260C/8270D by +22.9%. The results are reported as Estimated Values.
- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +27.1%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +3.0%. The results are reported as Estimated Values.
- Q-54l** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +3.6%. 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 8260C/8270D by +4.0%. 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 8260C/8270D by +4.8%. 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 8260C/8270D by +40.0%. 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 8260C/8270D by +5.0%. The results are reported as Estimated Values.
- Q-54q** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +5.5%. The results are reported as Estimated Values.
- Q-54r** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +6.4%. The results are reported as Estimated Values.
- Q-54s** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +7.5%. The results are reported as Estimated Values.
- Q-54t** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +8.1%. The results are reported as Estimated Values.
- Q-54u** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +99.3%. The results are reported as Estimated Values.
- Q-54v** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -0.7%. The results are reported as Estimated Values.

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

- Q-54w** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -2.2%. The results are reported as Estimated Values.
- Q-54x** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -4.9%. The results are reported as Estimated Values.
- Q-54y** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -5.3%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260C, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C
- 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-02** Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- 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.
- V-15** Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****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.

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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Tigard, OR 97223
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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

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

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

CHAIN OF CUSTODY

APEX LABS

6700 SW Sandburg St., Tigard, OR 97223 PH: 503-718-2323

Lab # 1960676 of

Company: <u>GeoDesign, Inc.</u>	Project Mgr: <u>Kyle Haggart</u>	Project Name: <u>BCSAmerica-1-01-02</u>	Project #:
Address: <u>9450 SW Commerce Circle</u>	Phone: <u>503 552 6644</u>	Email: <u>KHaggart@geodesigninc.com</u>	PO #
Sampled by: <u>Kyle Haggart</u>			
Site Located: _____			
OR WA CA	AK ID	ANALYSIS REQUEST	
SAMPLE ID	LAB ID #	DATE	TIME
DP-1 (5-6.5)		7/8/10 2:5	5
DP-1 (11-12.5)		10/31	
DP-1 (15-16.5)		10/10	
DP-1 (21-22.5)		10/30	
DP-1 (27.5-29)		11/00	
DP-2 (11-12.5)		11/15	
DP-2 (16.5-18)		11/20	
DP-2 (21-22.5)		11/35	
DP-2 (25-26.5)		11/40	
DP-3 (10-11.5)		12/20	
Normal Turn Around Time (TAT) = 10 Business Days			
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: _____			
SPECIAL INSTRUCTIONS: <u>Low level detections for table 17 values</u> <u>Possible follow up for Cu, Pb, Sn, Se, metals, upst</u> <u>EPA</u>			
RELINQUISHED BY:		RECEIVED BY:	
Signature: <u>[Signature]</u>	Date: <u>7/19/19</u>	Signature: _____	Date: _____
Printed Name: <u>Kyle Haggart</u>	Time: <u>1503</u>	Printed Name: _____	Time: _____
Company: <u>GeoDesign, Inc.</u>	Company: <u>Apex Labs</u>	Company: _____	Company: _____

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

APEX LABS		CHAIN OF CUSTODY		Lab # <u>A9G0676</u> of <u> </u>																					
Company: <u>GeoDesign Inc</u>		Project Mgr: <u>Kyle Haggart</u>		Project Name: <u>BCSAmerica-1-01-02</u>																					
Address: <u>9450 SW Commerce Circle Suite 320</u>		Phone: <u>503 577 8883</u>		Email: <u>khaggart@geodesigninc.com</u>																					
Sampled by: <u>Kyle Haggart</u>		Project #:		PO #																					
Site Location: <u>WA CA</u>		ANALYSIS REQUEST																							
AK ID <u> </u>																									
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Bi, Cd, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Se, Ag, Na, Ti, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	VPs	EPA	Archive		
DP-3 (22-23.5)		7/19/19	12:45	S	5																				
DP-4 (6.5-8)		7/19	8:20	S	5																				
DP-4 (11.5-13)		7/19	8:25	S	5																				
DP-4 (16.5-18)		7/19	8:30	S	5																				
DP-5 (6-7.5)		7/19	8:45	S	5																				
DP-5 (10-11.5)		7/19	8:55	S	5																				
DP-5 (15-16.5)		7/19	9:00	S	1																				
DP-6 (2-3.5)		7/19	9:10	S	1																				
DP-6 (6.5-8)		7/19	9:15	S	1																				
DP-6 (12-13.5)		7/19	9:20	S	1																				

Normal Turn Around Time (TAT) = 10 Business Days

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

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: <u>[Signature]</u>	RECEIVED BY: <u>[Signature]</u>
Date: <u>7/19/19</u>	Date: <u>7/19/19</u>
Printed Name: <u>Kyle Haggart</u>	Printed Name: <u>Amisha Kurga</u>
Company: <u>GeoDesign Inc</u>	Company: <u>Apex Labs</u>
Time: <u>1503</u>	Time: <u>1503</u>

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

CHAIN OF CUSTODY

APEX LABS

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

Lab # A9G0676 of

Company: <u>GeoDesign Inc</u>	Project Mgr: <u>Kyle Haggart</u>	Project Name: <u>BCSAmerica-1-01-02</u>	Project #:																		
Address: <u>9450 SW Commerce Circle Wilsonville</u>	Phone: <u>503 577 8853</u>	Email: <u>khaggart@geodesigninc.com</u>	PO #																		
Sampled by: <u>Kyle Haggart</u>	ANALYSIS REQUEST																				
Site Location: <u>WA CA</u>																					
AK ID <u> </u>																					
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Bi, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, Ti, V, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	Archive
<u>DP-6 (17-18.5)</u>	<u>7/19</u>	<u>9:25</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-7 (1-2.5)</u>	<u>7/19</u>	<u>9:30</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-7 (6.5-8)</u>	<u>7/19</u>	<u>9:35</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-7 (11.5-13)</u>	<u>7/19</u>	<u>9:40</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-7 (16.5-18)</u>	<u>7/19</u>	<u>9:45</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-8 (11.5-13)</u>	<u>7/19</u>	<u>9:50</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-8 (6.5-8)</u>	<u>7/19</u>	<u>9:55</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-8 (11.5-13)</u>	<u>7/19</u>	<u>9:58</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-8 (17-18.5)</u>	<u>7/19</u>	<u>10:00</u>	<u>5</u>	<u>5</u>	<u>5</u>																
<u>DP-9 (1-2.5)</u>	<u>7/19</u>	<u>10:10</u>	<u>5</u>	<u>5</u>	<u>5</u>																
Normal Turn Around Time (TAT) = 10 Business Days												SPECIAL INSTRUCTIONS:									
TAT Requested (circle)												1 Day 2 Day 3 Day 4 DAY 5 DAY Other: <u> </u>									
SAMPLES ARE HELD FOR 30 DAYS												RECEIVED BY: <u> </u> Date: <u>7/19/19</u> Time: <u>1503</u>									
RELINQUISHED BY: <u> </u> Date: <u>7/19/19</u> Time: <u>1503</u>												RELINQUISHED BY: <u> </u> Date: <u>7/19/19</u> Time: <u>1503</u>									
Printed Name: <u>Kyle Haggart</u> Company: <u>GeoDesign Inc</u>												Printed Name: <u>Amisha Koppa</u> Company: <u>Apex Labs</u>									

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

APEX LABS		CHAIN OF CUSTODY		Lab # _____ of _____	
Company: GeoDesign Inc		Project Mgr: Kyle Haggart		Project Name: BCSAmerica-1-01-02	
Address: 9450 SW Commerce Circle, Wilsonville, OR 97070		Phone: 503-557-5455		Email: khhaggart@geodesigninc.com	
Sampled by: Kyle Haggart		Date: 7/19/19		Time: 11:05	
Site Location: WA CA		LAB ID #		MATRIX	
AK ID		DATE		TIME	
SAMPLE ID		LAB ID #		TIME	
DP-12(05-2)	7/19	11:05	3	NWTPH-HCID	7/19
DP-12(5-65)	7/19	11:05	3	NWTPH-DX	7/19
DP-12(10-115)	7/19	11:05	3	NWTPH-GX	7/19
DP-12(65-18)	7/19	11:05	3	8260 BTEX	7/19
DP-13(15-3)	7/19	11:05	3	8260 RBDM VOCs	7/19
DP-13(5-65)	7/19	11:05	3	8260 Halo VOCs	7/19
DP-13(10-115)	7/19	11:05	3	8260 SIM PAHs	7/19
				8270 VOCs Full List	
				8270 SEMI-VOL Full List	
				8082 PCBs	
				8081 Pest	
				RCRA Metals (8)	
				Priority Metals (13)	
				As, Sb, Ar, Ba, Be, Bi, Cd, Cr, Co, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Se, Si, Sn, Ti, V, Zn	
				TOTAL DISS. TCLP	
				TCLP Metals (8)	
				Archive	

SPECIAL INSTRUCTIONS:	
Normal Turn Around Time (TAT) = 10 Business Days	
TAT Requested (circle)	
1 Day	2 Day
4 Day	5 Day
Other:	
SAMPLES ARE HELD FOR 30 DAYS	
RELINQUISHED BY:	RECEIVED BY:
Signature: _____	Signature: _____
Date: 7/19/19	Date: 7/19/19
Printed Name: Kyle Haggart	Printed Name: Amy Namborg
Company: GeoDesign Inc	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.

Philip Namborg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A9 G0676

Project/Project #: BCSAmerica-1-01-02

Delivery Info:

Date/time received: 7/19/19 @ 1503 By: APK

Delivered by: Apex ☐ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Date/time inspected: 7/19/19 @ 1503 By: APK

Chain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒

Signed/dated by client? Yes ☒ No ☐

Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.0</u>	<u>4.9</u>	<u>2.2</u>				
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Temp. blanks? (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>				
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>	<u>Real</u>				
Condition:	<u>Good</u>	<u>Good</u>	<u>Good</u>				

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: 7/22/19 @ 15:05 By: WJ

All samples intact? Yes ☒ No ☐ Comments:

Bottle labels/COCs agree? Yes ☐ No ☒ Comments: Label reads BCSAmerica-1-01-2,
on Project line and sample Id. Line. Bagged w/ DP-10(6-7.5)*

COC/container discrepancies form initiated? Yes ☐ No ☐ NA ☒

Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:

Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments:

Water samples: pH checked: Yes ☐ No ☐ NA ☒ pH appropriate? Yes ☐ No ☐ NA ☒

Comments:

Additional information: *Marked by time and date. Label reads DP-11(6-7.5) on
jar. Label reads DP-11(6-7.5)

Labeled by: WJ

Witness: TPM

Cooler Inspected by: WJ

See Project Contact Form: Y

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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.



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

Apex Laboratories
Philip Nerenberg
6700 SW Sandburg St
Tigard, OR 97223

RE: A9G0676
Work Order Number: 1907338

August 21, 2019

Attention Philip Nerenberg:

Fremont Analytical, Inc. received 47 sample(s) on 7/25/2019 for the analyses presented in the following report.

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

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Apex Laboratories
Project: A9G0676
Work Order: 1907338

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1907338-001	DP-1(5-6.5)	07/18/2019 10:25 AM	07/25/2019 9:49 AM
1907338-002	DP-1(11-12.5)	07/18/2019 10:32 AM	07/25/2019 9:49 AM
1907338-003	DP-1(15-16.5)	07/18/2019 10:40 AM	07/25/2019 9:49 AM
1907338-004	DP-1(21-22.5)	07/18/2019 10:50 AM	07/25/2019 9:49 AM
1907338-005	DP-1(27.5-29)	07/18/2019 11:00 AM	07/25/2019 9:49 AM
1907338-006	DP-2(11-12.5)	07/18/2019 11:15 AM	07/25/2019 9:49 AM
1907338-007	DP-2(16.5-18)	07/18/2019 11:20 AM	07/25/2019 9:49 AM
1907338-008	DP-2(21-22.5)	07/18/2019 11:35 AM	07/25/2019 9:49 AM
1907338-009	DP-2(25-26.5)	07/18/2019 11:40 AM	07/25/2019 9:49 AM
1907338-010	DP-3(10-11.5)	07/18/2019 12:00 PM	07/25/2019 9:49 AM
1907338-011	DP-3(22-23.5)	07/18/2019 12:18 PM	07/25/2019 9:49 AM
1907338-012	DP-4(6.5-8)	07/19/2019 8:20 AM	07/25/2019 9:49 AM
1907338-013	DP-4(11.5-13)	07/19/2019 8:25 AM	07/25/2019 9:49 AM
1907338-014	DP-4(16.5-18)	07/19/2019 8:30 AM	07/25/2019 9:49 AM
1907338-015	DP-5(6-7.5)	07/19/2019 8:47 AM	07/25/2019 9:49 AM
1907338-016	DP-5(10-11.5)	07/19/2019 8:55 AM	07/25/2019 9:49 AM
1907338-017	DP-5(15-16.5)	07/19/2019 9:00 AM	07/25/2019 9:49 AM
1907338-018	DP-6(2-3.5)	07/19/2019 9:10 AM	07/25/2019 9:49 AM
1907338-019	DP-6(6.5-8)	07/19/2019 9:15 AM	07/25/2019 9:49 AM
1907338-020	DP-6(12-13.5)	07/19/2019 9:20 AM	07/25/2019 9:49 AM
1907338-021	DP-6(17-18.5)	07/19/2019 9:25 AM	07/25/2019 9:49 AM
1907338-022	DP-7(1-2.5)	07/19/2019 9:30 AM	07/25/2019 9:49 AM
1907338-023	DP-7(6.5-8)	07/19/2019 9:35 AM	07/25/2019 9:49 AM
1907338-024	DP-7(11.5-13)	07/19/2019 9:40 AM	07/25/2019 9:49 AM
1907338-025	DP-7(16.5-18)	07/19/2019 9:45 AM	07/25/2019 9:49 AM
1907338-026	DP-8(1.5-3)	07/19/2019 9:50 AM	07/25/2019 9:49 AM
1907338-027	DP-8(6.5-8)	07/19/2019 9:55 AM	07/25/2019 9:49 AM
1907338-028	DP-8(11.5-13)	07/19/2019 9:58 AM	07/25/2019 9:49 AM
1907338-029	DP-8(17-18.5)	07/19/2019 10:00 AM	07/25/2019 9:49 AM
1907338-030	DP-9(1-2.5)	07/19/2019 10:10 AM	07/25/2019 9:49 AM
1907338-031	DP-9(6.5-8)	07/19/2019 10:15 AM	07/25/2019 9:49 AM
1907338-032	DP-9(11-12.5)	07/19/2019 10:20 AM	07/25/2019 9:49 AM
1907338-033	DP-9(16.5-18)	07/19/2019 10:25 AM	07/25/2019 9:49 AM
1907338-034	DP-10(1.5-3)	07/19/2019 10:30 AM	07/25/2019 9:49 AM
1907338-035	DP-10(6-7.5)	07/19/2019 10:35 AM	07/25/2019 9:49 AM
1907338-036	DP-10(11.5-13)	07/19/2019 10:40 AM	07/25/2019 9:49 AM

CLIENT: Apex Laboratories
Project: A9G0676
Work Order: 1907338

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1907338-037	DP-10(16.5-18)	07/19/2019 10:45 AM	07/25/2019 9:49 AM
1907338-038	DP-11(6-7.5)	07/19/2019 10:50 AM	07/25/2019 9:49 AM
1907338-039	DP-11(10-11.5)	07/19/2019 10:55 AM	07/25/2019 9:49 AM
1907338-040	DP-11(16.5-18)	07/19/2019 11:00 AM	07/25/2019 9:49 AM
1907338-041	DP-12(0.5-2)	07/19/2019 11:10 AM	07/25/2019 9:49 AM
1907338-042	DP-12(5-6.5)	07/19/2019 11:15 AM	07/25/2019 9:49 AM
1907338-043	DP-12(10-11.5)	07/19/2019 11:20 AM	07/25/2019 9:49 AM
1907338-044	DP-12(16.5-18)	07/19/2019 11:25 AM	07/25/2019 9:49 AM
1907338-045	DP-13(1.5-3)	07/19/2019 11:30 AM	07/25/2019 9:49 AM
1907338-046	DP-13(5-6.5)	07/19/2019 11:35 AM	07/25/2019 9:49 AM
1907338-047	DP-13(10-11.5)	07/19/2019 11:40 AM	07/25/2019 9:49 AM

CLIENT: Apex Laboratories**Project:** A9G0676

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

8/21/19: Rev1 includes only VPH carbon ranges per client request.

Qualifiers:

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

Acronyms:

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



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 10:32:00 AM

Project: A9G0676

Lab ID: 1907338-002

Matrix: Soil

Client Sample ID: DP-1(11-12.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	25.9	*	mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	13.0	*	mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	13.0	*	mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	13.0		mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	13.0		mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	13.0		mg/Kg-dry	1	8/7/2019 12:31:00 PM
Surr: 1-Chlorooctadecane	62.5	60 - 140		%Rec	1	8/6/2019 5:08:00 PM
Surr: o-Terphenyl	64.1	60 - 140		%Rec	1	8/7/2019 12:31:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	3.69		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aliphatic Hydrocarbon (C6-C8)	ND	5.28		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aliphatic Hydrocarbon (C8-C10)	ND	2.96		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aliphatic Hydrocarbon (C10-C12)	ND	3.17		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aromatic Hydrocarbon (C8-C10)	ND	6.33		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aromatic Hydrocarbon (C10-C12)	ND	1.27		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aromatic Hydrocarbon (C12-C13)	ND	14.8		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Surr: 1,4-Difluorobenzene	101	65 - 140		%Rec	1	7/29/2019 9:25:02 PM
Surr: Bromofluorobenzene	104	65 - 140		%Rec	1	7/29/2019 9:25:02 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	24.0	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 11:15:00 AM

Project: A9G0676

Lab ID: 1907338-006

Matrix: Soil

Client Sample ID: DP-2(11-12.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	18.8	*	mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	9.42	*	mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	9.42	*	mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	9.42		mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	9.42		mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	9.42		mg/Kg-dry	1	8/7/2019 1:15:00 PM
Surr: 1-Chlorooctadecane	64.9	60 - 140		%Rec	1	8/6/2019 5:53:00 PM
Surr: o-Terphenyl	68.8	60 - 140		%Rec	1	8/7/2019 1:15:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.04		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aliphatic Hydrocarbon (C6-C8)	ND	2.91		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.63		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.74		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.49		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.698		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aromatic Hydrocarbon (C12-C13)	ND	8.14		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Surr: 1,4-Difluorobenzene	99.2	65 - 140		%Rec	1	7/29/2019 10:06:09 PM
Surr: Bromofluorobenzene	102	65 - 140		%Rec	1	7/29/2019 10:06:09 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	8.83	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 11:35:00 AM

Project: A9G0676

Lab ID: 1907338-008

Matrix: Soil

Client Sample ID: DP-2(21-22.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	20.4	*	mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.2	*	mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.2	*	mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/13/2019 6:54:00 PM
Surr: 1-Chlorooctadecane	84.6	60 - 140		%Rec	1	8/13/2019 12:01:00 PM
Surr: o-Terphenyl	80.3	60 - 140		%Rec	1	8/13/2019 6:54:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	1.96		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aliphatic Hydrocarbon (C6-C8)	ND	2.81		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.57	H	mg/Kg-dry	1	8/8/2019 11:14:26 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.57	Q	mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.68		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.37		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aromatic Hydrocarbon (C10-C12)	0.880	0.673	Q	mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.673	H	mg/Kg-dry	1	8/8/2019 11:14:26 PM
Aromatic Hydrocarbon (C12-C13)	ND	7.85	H	mg/Kg-dry	1	8/8/2019 11:14:26 PM
Aromatic Hydrocarbon (C12-C13)	ND	7.85	Q	mg/Kg-dry	1	8/1/2019 11:27:18 PM
Surr: 1,4-Difluorobenzene	101	65 - 140		%Rec	1	8/1/2019 11:27:18 PM
Surr: Bromofluorobenzene	104	65 - 140		%Rec	1	8/1/2019 11:27:18 PM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	16.7	0.500		wt%	1	8/2/2019 3:37:27 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 12:00:00 PM

Project: A9G0676

Lab ID: 1907338-010

Matrix: Soil

Client Sample ID: DP-3(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	24.4	*	mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	12.2	*	mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	12.2	*	mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	12.2		mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	12.2		mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	12.2		mg/Kg-dry	1	8/7/2019 1:59:00 PM
Surr: 1-Chlorooctadecane	70.5	60 - 140		%Rec	1	8/6/2019 6:40:00 PM
Surr: o-Terphenyl	74.9	60 - 140		%Rec	1	8/7/2019 1:59:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.30		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aliphatic Hydrocarbon (C6-C8)	ND	3.29		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.84		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.97		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.95		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.790		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aromatic Hydrocarbon (C12-C13)	ND	9.21		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Surr: 1,4-Difluorobenzene	99.4	65 - 140		%Rec	1	7/29/2019 10:47:20 PM
Surr: Bromofluorobenzene	102	65 - 140		%Rec	1	7/29/2019 10:47:20 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	20.4	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 8:55:00 AM

Project: A9G0676

Lab ID: 1907338-016

Matrix: Soil

Client Sample ID: DP-5(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	20.5	*	mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.2	*	mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.2	*	mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/7/2019 2:43:00 PM
Surr: 1-Chlorooctadecane	78.9	60 - 140		%Rec	1	8/6/2019 7:26:00 PM
Surr: o-Terphenyl	77.4	60 - 140		%Rec	1	8/7/2019 2:43:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.01		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aliphatic Hydrocarbon (C6-C8)	ND	2.87		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.61		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.72		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.44		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.688		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aromatic Hydrocarbon (C12-C13)	ND	8.03		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Surr: 1,4-Difluorobenzene	99.7	65 - 140		%Rec	1	7/29/2019 11:28:23 PM
Surr: Bromofluorobenzene	101	65 - 140		%Rec	1	7/29/2019 11:28:23 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	10.5	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 10:35:00 AM

Project: A9G0676

Lab ID: 1907338-035

Matrix: Soil

Client Sample ID: DP-10(6-7.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	20.9	*	mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.4	*	mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.4	*	mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.4		mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.4		mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.4		mg/Kg-dry	1	8/7/2019 3:28:00 PM
Surr: 1-Chlorooctadecane	71.4	60 - 140		%Rec	1	8/6/2019 8:12:00 PM
Surr: o-Terphenyl	61.5	60 - 140		%Rec	1	8/8/2019 1:01:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.07		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.95		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.65		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aliphatic Hydrocarbon (C10-C12)	ND	1.77		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.54		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.709		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aromatic Hydrocarbon (C12-C13)	ND	8.27		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Surr: 1,4-Difluorobenzene	97.9	65 - 140		%Rec	1	7/30/2019 12:09:25 AM
Surr: Bromofluorobenzene	99.1	65 - 140		%Rec	1	7/30/2019 12:09:25 AM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	10.9	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 10:50:00 AM

Project: A9G0676

Lab ID: 1907338-038

Matrix: Soil

Client Sample ID: DP-11(6-7.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	23.8	*	mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C21-C34)	17.1	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	11.9	*	mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	11.9	*	mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	11.9		mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C16-C21)	17.8	11.9		mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C21-C34)	62.4	11.9		mg/Kg-dry	1	8/7/2019 4:13:00 PM
Surr: 1-Chlorooctadecane	49.0	60 - 140	S	%Rec	1	8/6/2019 8:58:00 PM
Surr: o-Terphenyl	55.1	60 - 140	S	%Rec	1	8/7/2019 4:13:00 PM

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.90		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aliphatic Hydrocarbon (C6-C8)	ND	4.14		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.32		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aliphatic Hydrocarbon (C10-C12)	ND	2.49		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aromatic Hydrocarbon (C8-C10)	ND	4.97		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aromatic Hydrocarbon (C10-C12)	1.25	0.994		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aromatic Hydrocarbon (C12-C13)	ND	11.6		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Surr: 1,4-Difluorobenzene	97.4	65 - 140		%Rec	1	7/30/2019 12:50:26 AM
Surr: Bromofluorobenzene	97.1	65 - 140		%Rec	1	7/30/2019 12:50:26 AM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	18.4	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 10:55:00 AM

Project: A9G0676

Lab ID: 1907338-039

Matrix: Soil

Client Sample ID: DP-11(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	18.9	*	mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	9.46	*	mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	9.46	*	mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	9.46		mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	9.46		mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	9.46		mg/Kg-dry	1	8/13/2019 7:41:00 PM
Surr: 1-Chlorooctadecane	73.9	60 - 140		%Rec	1	8/13/2019 12:45:00 PM
Surr: o-Terphenyl	76.8	60 - 140		%Rec	1	8/13/2019 7:41:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.89		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aliphatic Hydrocarbon (C6-C8)	ND	4.14		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.32	H	mg/Kg-dry	1	8/8/2019 11:55:21 PM
Aliphatic Hydrocarbon (C8-C10)	ND	2.32	Q	mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aliphatic Hydrocarbon (C10-C12)	ND	2.48		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aromatic Hydrocarbon (C8-C10)	ND	4.96		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.992	Q	mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.992	H	mg/Kg-dry	1	8/8/2019 11:55:21 PM
Aromatic Hydrocarbon (C12-C13)	ND	11.6	H	mg/Kg-dry	1	8/8/2019 11:55:21 PM
Aromatic Hydrocarbon (C12-C13)	ND	11.6	Q	mg/Kg-dry	1	8/2/2019 12:49:53 AM
Surr: 1,4-Difluorobenzene	101	65 - 140		%Rec	1	8/2/2019 12:49:53 AM
Surr: Bromofluorobenzene	102	65 - 140		%Rec	1	8/2/2019 12:49:53 AM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	9.91	0.500		wt%	1	8/2/2019 3:37:27 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:15:00 AM

Project: A9G0676

Lab ID: 1907338-042

Matrix: Soil

Client Sample ID: DP-12(5-6.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	21.8	*	mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C12-C16)	62.9	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C16-C21)	78.8	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C21-C34)	26.9	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.9	*	mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.9	*	mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.9		mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C16-C21)	16.1	10.9		mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C21-C34)	54.0	10.9		mg/Kg-dry	1	8/7/2019 11:44:00 PM
Surr: 1-Chlorooctadecane	53.5	60 - 140	S	%Rec	1	8/6/2019 9:43:00 PM
Surr: o-Terphenyl	61.5	60 - 140		%Rec	1	8/7/2019 11:44:00 PM

NOTES:

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

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.28		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aliphatic Hydrocarbon (C6-C8)	ND	3.26		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.83		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aliphatic Hydrocarbon (C10-C12)	2.12	1.96		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.91		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aromatic Hydrocarbon (C10-C12)	6.63	0.783		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aromatic Hydrocarbon (C12-C13)	ND	9.13		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Surr: 1,4-Difluorobenzene	95.9	65 - 140		%Rec	1	7/30/2019 1:31:32 AM
Surr: Bromofluorobenzene	94.9	65 - 140		%Rec	1	7/30/2019 1:31:32 AM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	15.0	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:20:00 AM

Project: A9G0676

Lab ID: 1907338-043

Matrix: Soil

Client Sample ID: DP-12(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	21.4	*	mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.7	*	mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.7	*	mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.7		mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.7		mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.7		mg/Kg-dry	1	8/13/2019 8:28:00 PM
Surr: 1-Chlorooctadecane	78.7	60 - 140		%Rec	1	8/13/2019 1:30:00 PM
Surr: o-Terphenyl	63.2	60 - 140		%Rec	1	8/13/2019 8:28:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	1.86		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.66		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.49	H	mg/Kg-dry	1	8/9/2019 12:36:16 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.49	Q	mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aliphatic Hydrocarbon (C10-C12)	ND	1.60		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.20		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.639	Q	mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.639	H	mg/Kg-dry	1	8/9/2019 12:36:16 AM
Aromatic Hydrocarbon (C12-C13)	ND	7.46	H	mg/Kg-dry	1	8/9/2019 12:36:16 AM
Aromatic Hydrocarbon (C12-C13)	ND	7.46	Q	mg/Kg-dry	1	8/2/2019 1:31:04 AM
Surr: 1,4-Difluorobenzene	99.0	65 - 140		%Rec	1	8/2/2019 1:31:04 AM
Surr: Bromofluorobenzene	99.2	65 - 140		%Rec	1	8/2/2019 1:31:04 AM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	9.46	0.500		wt%	1	8/2/2019 3:37:27 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:35:00 AM

Project: A9G0676

Lab ID: 1907338-046

Matrix: Soil

Client Sample ID: DP-13(5-6.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	19.8	*	mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C10-C12)	ND	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C12-C16)	11.4	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C16-C21)	58.3	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C21-C34)	158	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aromatic Hydrocarbon (C8-C10)	ND	9.88	*	mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	9.88	*	mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	9.88		mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C16-C21)	25.4	9.88		mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C21-C34)	128	9.88		mg/Kg-dry	1	8/8/2019 12:29:00 AM
Surr: 1-Chlorooctadecane	54.4	60 - 140	S	%Rec	1	8/7/2019 3:41:00 AM
Surr: o-Terphenyl	53.6	60 - 140	S	%Rec	1	8/8/2019 12:29:00 AM

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	1.93		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.76		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aliphatic Hydrocarbon (C8-C10)	1.83	1.55		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aliphatic Hydrocarbon (C10-C12)	9.89	1.66		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.32		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aromatic Hydrocarbon (C10-C12)	10.4	0.663		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aromatic Hydrocarbon (C12-C13)	11.8	7.74	*	mg/Kg-dry	1	7/30/2019 2:12:37 AM
Surr: 1,4-Difluorobenzene	95.7	65 - 140		%Rec	1	7/30/2019 2:12:37 AM
Surr: Bromofluorobenzene	98.5	65 - 140		%Rec	1	7/30/2019 2:12:37 AM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	10.9	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:40:00 AM

Project: A9G0676

Lab ID: 1907338-047

Matrix: Soil

Client Sample ID: DP-13(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	22.4	*	mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C10-C12)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C12-C16)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C16-C21)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C21-C34)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aromatic Hydrocarbon (C8-C10)	ND	11.2	*	mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	11.2	*	mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	11.2		mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	11.2		mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	11.2		mg/Kg-dry	1	8/7/2019 10:15:00 PM
Surr: 1-Chlorooctadecane	72.5	60 - 140		%Rec	1	8/7/2019 5:54:00 AM
Surr: o-Terphenyl	71.3	60 - 140		%Rec	1	8/7/2019 10:15:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.58		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aliphatic Hydrocarbon (C6-C8)	ND	3.68		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.06	H	mg/Kg-dry	1	8/9/2019 1:58:05 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.06	Q	mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aliphatic Hydrocarbon (C10-C12)	ND	2.21		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aromatic Hydrocarbon (C8-C10)	ND	4.42		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.884	Q	mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.884	H	mg/Kg-dry	1	8/9/2019 1:58:05 AM
Aromatic Hydrocarbon (C12-C13)	ND	10.3	H	mg/Kg-dry	1	8/9/2019 1:58:05 AM
Aromatic Hydrocarbon (C12-C13)	ND	10.3	Q	mg/Kg-dry	1	8/2/2019 2:12:21 AM
Surr: 1,4-Difluorobenzene	99.4	65 - 140		%Rec	1	8/2/2019 2:12:21 AM
Surr: Bromofluorobenzene	98.8	65 - 140		%Rec	1	8/2/2019 2:12:21 AM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	21.7	0.500		wt%	1	8/2/2019 3:37:27 PM

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: MB-25343	SampType: MBLK	Units: mg/Kg			Prep Date: 7/30/2019			RunNo: 53106			
Client ID: MBLKS	Batch ID: 25343	Analysis Date: 8/6/2019							SeqNo: 1049723		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	20.0									*
Aliphatic Hydrocarbon (C10-C12)	ND	10.0									
Aliphatic Hydrocarbon (C12-C16)	ND	10.0									
Aliphatic Hydrocarbon (C16-C21)	ND	10.0									
Aliphatic Hydrocarbon (C21-C34)	ND	10.0									
Surr: 1-Chlorooctadecane	92.5		100.0		92.5	60	140				

NOTES:

* - Flagged value is not within established control limits.

Sample ID: LCS-25343		SampType: LCS		Units: mg/Kg		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: LCSS		Batch ID: 25343		Analysis Date: 8/6/2019						SeqNo: 1049799	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	99.8	20.0	250.0	0	39.9	70	130				S
Aliphatic Hydrocarbon (C10-C12)	159	10.0	125.0	0	127	70	130				
Aliphatic Hydrocarbon (C12-C16)	118	10.0	125.0	0	94.6	70	130				
Aliphatic Hydrocarbon (C16-C21)	119	10.0	125.0	0	95.2	70	130				
Aliphatic Hydrocarbon (C21-C34)	114	10.0	125.0	0	91.0	70	130				
Surr: 1-Chlorooctadecane	74.5		100.0		74.5	60	140				

NOTES:

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

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343		Analysis Date: 8/7/2019						SeqNo: 1049710	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	23.8						0		25	*
Aliphatic Hydrocarbon (C10-C12)	ND	11.9						0		25	
Aliphatic Hydrocarbon (C12-C16)	ND	11.9						0		25	
Aliphatic Hydrocarbon (C16-C21)	ND	11.9						0		25	
Aliphatic Hydrocarbon (C21-C34)	ND	11.9						0		25	
Surr: 1-Chlorooctadecane	70.1		119.0		58.9	60	140		0		S

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343		Analysis Date: 8/7/2019						SeqNo: 1049710	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Outlying surrogate recovery(ies) observed.

* - Flagged value is not within established control limits.

Sample ID: 1907338-002AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/7/2019			SeqNo: 1049711				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	111	24.2	302.5	0	36.7	70	130				S
Aliphatic Hydrocarbon (C10-C12)	131	12.1	151.3	0	86.7	70	130				
Aliphatic Hydrocarbon (C12-C16)	132	12.1	151.3	0	87.2	70	130				
Aliphatic Hydrocarbon (C16-C21)	133	12.1	151.3	0	87.8	70	130				
Aliphatic Hydrocarbon (C21-C34)	126	12.1	151.3	0	83.1	70	130				
Surr: 1-Chlorooctadecane	79.3		121.0		65.5	60	140				

NOTES:

S - Outlying spike recovery(ies) observed.

Sample ID: 1907338-002AMSD		SampType: MSD			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/7/2019			SeqNo: 1049798				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	116	26.2	326.9	0	35.5	70	130	111.1	4.51	30	S
Aliphatic Hydrocarbon (C10-C12)	130	13.1	163.4	0	79.5	70	130	131.1	0.923	30	
Aliphatic Hydrocarbon (C12-C16)	118	13.1	163.4	0	72.1	70	130	131.9	11.2	30	
Aliphatic Hydrocarbon (C16-C21)	119	13.1	163.4	0	73.1	70	130	132.8	10.5	30	
Aliphatic Hydrocarbon (C21-C34)	119	13.1	163.4	0	72.6	70	130	125.7	5.69	30	
Surr: 1-Chlorooctadecane	91.9		130.8		70.3	60	140		0		

NOTES:

S - Outlying spike recovery(ies) observed.

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-047ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019		RunNo: 53106			
Client ID: DP-13(10-11.5)		Batch ID: 25343				Analysis Date: 8/7/2019		SeqNo: 1049718			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	24.9						0		25	*
Aliphatic Hydrocarbon (C10-C12)	ND	12.5						0		25	
Aliphatic Hydrocarbon (C12-C16)	ND	12.5						0		25	
Aliphatic Hydrocarbon (C16-C21)	ND	12.5						0		25	
Aliphatic Hydrocarbon (C21-C34)	ND	12.5						0		25	
Surr: 1-Chlorooctadecane	93.1		124.7		74.7	60	140		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID: MB-25343		SampType: MBLK		Units: mg/Kg		Prep Date: 7/30/2019		RunNo: 53106			
Client ID: MBLKS		Batch ID: 25343				Analysis Date: 8/7/2019		SeqNo: 1049836			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	ND	10.0									*
Aromatic Hydrocarbon (C10-C12)	ND	10.0									*
Aromatic Hydrocarbon (C12-C16)	ND	10.0									
Aromatic Hydrocarbon (C16-C21)	ND	10.0									
Aromatic Hydrocarbon (C21-C34)	ND	10.0									
Surr: o-Terphenyl	80.9		100.0		80.9	60	140				

NOTES:

* - Flagged value is not within established control limits.

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019		RunNo: 53106			
Client ID: DP-1(11-12.5)		Batch ID: 25343				Analysis Date: 8/7/2019		SeqNo: 1049825			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	ND	11.9						0		25	*
Aromatic Hydrocarbon (C10-C12)	ND	11.9						0		25	*
Aromatic Hydrocarbon (C12-C16)	ND	11.9						0		25	
Aromatic Hydrocarbon (C16-C21)	ND	11.9						0		25	
Aromatic Hydrocarbon (C21-C34)	ND	11.9						0		25	

Work Order: 1907338

CLIENT: Apex Laboratories

Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-002ADUP	SampType: DUP	Units: mg/Kg-dry	Prep Date: 7/30/2019	RunNo: 53106							
Client ID: DP-1(11-12.5)	Batch ID: 25343		Analysis Date: 8/7/2019	SeqNo: 1049825							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

* - Flagged value is not within established control limits.

Sample ID: 1907338-002AMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 7/30/2019			RunNo: 53106			
Client ID: DP-1(11-12.5)	Batch ID: 25343				Analysis Date: 8/7/2019			SeqNo: 1049826			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	38.1	12.1	302.5	0	12.6	70	130				S
Aromatic Hydrocarbon (C10-C12)	67.8	12.1	151.3	0	44.8	70	130				S
Aromatic Hydrocarbon (C12-C16)	93.0	12.1	151.3	0	61.4	70	130				S
Surr: o-Terphenyl	79.1		121.0		65.4	60	140				

NOTES:

S - Outlying spike recovery(ies) observed.

Sample ID: 1907338-002AMSD	SampType: MSD	Units: mg/Kg-dry				Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)	Batch ID: 25343	Analysis Date: 8/7/2019							SeqNo: 1049827		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	61.9	13.1	326.9	0	18.9	70	130	38.13	47.5	30	RS
Aromatic Hydrocarbon (C10-C12)	105	13.1	163.4	0	64.4	70	130	67.75	43.4	30	RS
Surr: o-Terphenyl	96.6		130.8		73.9	60	140		0		

NOTES:

S - Outlying spike recovery(ies) observed.

R - High RPD due to suspected sample inhomogeneity.

Sample ID: 1907338-047ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-13(10-11.5)		Batch ID: 25343			Analysis Date: 8/7/2019					SeqNo: 1049829		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Aromatic Hydrocarbon (C8-C10)	ND	12.5						0		25	*	
Aromatic Hydrocarbon (C10-C12)	ND	12.5						0		25	*	
Aromatic Hydrocarbon (C12-C16)	ND	12.5						0		25		

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-047ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-13(10-11.5)		Batch ID: 25343			Analysis Date: 8/7/2019					SeqNo: 1049829		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aromatic Hydrocarbon (C16-C21)	ND	12.5						0		25	
Aromatic Hydrocarbon (C21-C34)	ND	12.5						0		25	
Surr: o-Terphenyl	87.7		124.7		70.4	60	140		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID: LCS-25343		SampType: LCS			Units: mg/Kg		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: LCSS		Batch ID: 25343			Analysis Date: 8/8/2019			SeqNo: 1049835				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aromatic Hydrocarbon (C8-C10)	14.8	10.0	250.0	0	5.92	70	130				S
Aromatic Hydrocarbon (C10-C12)	46.5	10.0	125.0	0	37.2	70	130				S
Aromatic Hydrocarbon (C12-C16)	101	10.0	125.0	0	80.4	70	130				
Aromatic Hydrocarbon (C16-C21)	114	10.0	125.0	0	91.1	70	130				
Aromatic Hydrocarbon (C21-C34)	100	10.0	125.0	0	80.2	70	130				
Surr: o-Terphenyl	86.2		100.0		86.2	60	140				

NOTES:

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

Sample ID: 1907338-002ADUP		SampType: DUP			Units: %Rec		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/8/2019			SeqNo: 1050366				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Surr: o-Terphenyl	72.4		119.0		60.8	60	140		0		

Sample ID: 1907338-002AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 7/30/2019		RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/8/2019				SeqNo: 1050367		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aromatic Hydrocarbon (C16-C21)	106	12.1	151.3	0	70.1	70	130				
Aromatic Hydrocarbon (C21-C34)	125	12.1	151.3	0	82.4	70	130				

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-002AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 7/30/2019		RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/8/2019				SeqNo: 1050367		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: o-Terphenyl	82.7		121.0		68.3	60	140				

Sample ID: 1907338-002AMSD		SampType: MSD			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/8/2019			SeqNo: 1050368				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aromatic Hydrocarbon (C12-C16)	121	13.1	163.4	0	73.8	70	130	92.61	26.2	30	
Aromatic Hydrocarbon (C16-C21)	119	13.1	163.4	0	72.5	70	130	106.1	11.1	30	
Aromatic Hydrocarbon (C21-C34)	120	13.1	163.4	0	73.2	70	130	124.6	4.04	30	
Surr: o-Terphenyl	92.3		130.8		70.6	60	140		0		



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCS-25324	SampType: LCS	Units: mg/Kg				Prep Date: 7/29/2019			RunNo: 52983		
Client ID: LCSS	Batch ID: 25324	Analysis Date: 7/29/2019							SeqNo: 1046786		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	33.3	1.75	30.00	0	111	70	130				
Aliphatic Hydrocarbon (C6-C8)	9.95	2.50	10.00	0	99.5	70	130				
Aliphatic Hydrocarbon (C8-C10)	9.78	1.40	10.00	0	97.8	70	130				
Aliphatic Hydrocarbon (C10-C12)	9.90	1.50	10.00	0	99.0	70	130				
Aromatic Hydrocarbon (C8-C10)	44.1	3.00	40.00	0	110	70	130				
Aromatic Hydrocarbon (C10-C12)	11.3	0.600	10.00	0	113	70	130				
Aromatic Hydrocarbon (C12-C13)	13.1	7.00	10.00	0	131	70	130				S
Surr: 1,4-Difluorobenzene	2.63		2.500		105	65	140				
Surr: Bromofluorobenzene	2.74		2.500		109	65	140				

NOTES:

S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.

Sample ID: MB-25324	SampType: MBLK	Units: mg/Kg				Prep Date: 7/29/2019			RunNo: 52983		
Client ID: MBLKS	Batch ID: 25324	Analysis Date: 7/29/2019							SeqNo: 1046787		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	1.75		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	2.50		0	0						
Aliphatic Hydrocarbon (C8-C10)	ND	1.40		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	1.50		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	3.00		0	0						
Aromatic Hydrocarbon (C10-C12)	ND	0.600		0	0						
Aromatic Hydrocarbon (C12-C13)	ND	7.00		0	0						
Surr: 1,4-Difluorobenzene	2.51		2.500		100	65	140				
Surr: Bromofluorobenzene	2.62		2.500		105	65	140				

Sample ID: 1907338-046BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: DP-13(5-6.5)		Batch ID: 25324		Analysis Date: 7/30/2019						SeqNo: 1046783	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	1.93		0	0			0		25	

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: 1907338-046BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: DP-13(5-6.5)		Batch ID: 25324				Analysis Date: 7/30/2019			SeqNo: 1046783		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C6-C8)	ND	2.76		0	0			0		25	
Aliphatic Hydrocarbon (C8-C10)	2.31	1.55		0	0			1.830	23.1	25	
Aliphatic Hydrocarbon (C10-C12)	8.02	1.66		0	0			9.888	20.8	25	
Aromatic Hydrocarbon (C8-C10)	ND	3.32		0	0			0		25	
Aromatic Hydrocarbon (C10-C12)	10.6	0.663		0	0			10.43	1.28	25	
Aromatic Hydrocarbon (C12-C13)	12.9	7.74		0	0			11.77	9.42	25	*
Surr: 1,4-Difluorobenzene	2.62		2.763		94.7	65	140		0		
Surr: Bromofluorobenzene	2.61		2.763		94.5	65	140		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID: 1907320-001AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: BATCH		Batch ID: 25324		Analysis Date: 7/30/2019					SeqNo: 1046773		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	20.6	1.20	20.61	0	99.9	70	130				
Aliphatic Hydrocarbon (C6-C8)	25.5	1.72	6.869	13.37	176	70	130				S
Aliphatic Hydrocarbon (C8-C10)	39.6	0.962	6.869	34.71	70.9	70	130				
Aliphatic Hydrocarbon (C10-C12)	45.5	1.03	6.869	38.82	96.9	70	130				
Aromatic Hydrocarbon (C8-C10)	63.1	2.06	27.48	37.51	93.2	70	130				
Aromatic Hydrocarbon (C10-C12)	53.2	0.412	6.869	45.56	111	70	130				E
Aromatic Hydrocarbon (C12-C13)	71.2	4.81	6.869	66.20	72.3	70	130				E
Surr: 1,4-Difluorobenzene	1.74		1.717		101	65	140				
Surr: Bromofluorobenzene	1.92		1.717		112	65	140				

NOTES:

S - Outlying spike recovery(ies) observed.

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

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: 1907320-001AMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: BATCH		Batch ID: 25324		Analysis Date: 7/30/2019					SeqNo: 1046774		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	20.6	1.20	20.61	0	99.9	70	130	20.58	0.0172	30	
Aliphatic Hydrocarbon (C6-C8)	25.4	1.72	6.869	13.37	175	70	130	25.48	0.387	30	S
Aliphatic Hydrocarbon (C8-C10)	39.5	0.962	6.869	34.71	69.6	70	130	39.58	0.231	30	S
Aliphatic Hydrocarbon (C10-C12)	45.7	1.03	6.869	38.82	99.6	70	130	45.48	0.396	30	
Aromatic Hydrocarbon (C8-C10)	63.6	2.06	27.48	37.51	95.0	70	130	63.13	0.765	30	
Aromatic Hydrocarbon (C10-C12)	52.0	0.412	6.869	45.56	93.3	70	130	53.21	2.36	30	E
Aromatic Hydrocarbon (C12-C13)	74.4	4.81	6.869	66.20	119	70	130	71.17	4.43	30	E
Surr: 1,4-Difluorobenzene	1.71		1.717		99.4	65	140		0		
Surr: Bromofluorobenzene	1.84		1.717		107	65	140		0		

NOTES:

S - Outlying spike recovery(ies) observed.

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

Sample ID: LCS-25370		SampType: LCS		Units: mg/Kg		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: LCSS		Batch ID: 25370					Analysis Date: 8/1/2019			SeqNo: 1049215	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	31.5	1.75	30.00	0	105	70	130				
Aliphatic Hydrocarbon (C6-C8)	9.51	2.50	10.00	0	95.1	70	130				
Aliphatic Hydrocarbon (C8-C10)	9.09	1.40	10.00	0	90.9	70	130				
Aliphatic Hydrocarbon (C10-C12)	10.2	1.50	10.00	0	102	70	130				
Aromatic Hydrocarbon (C8-C10)	44.7	3.00	40.00	0	112	70	130				
Aromatic Hydrocarbon (C10-C12)	9.19	0.600	10.00	0	91.9	70	130				
Aromatic Hydrocarbon (C12-C13)	11.5	7.00	10.00	0	115	70	130				
Surr: 1,4-Difluorobenzene	2.73		2.500		109	65	140				
Surr: Bromofluorobenzene	2.77		2.500		111	65	140				



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCSD-25370		SampType: LCSD			Units: mg/Kg		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: LCSS02		Batch ID: 25370			Analysis Date: 8/1/2019			SeqNo: 1049216				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C5-C6)	31.1	1.75	30.00	0	104	70	130	31.49	1.28	20	
Aliphatic Hydrocarbon (C6-C8)	8.95	2.50	10.00	0	89.5	70	130	9.509	6.09	20	
Aliphatic Hydrocarbon (C8-C10)	9.59	1.40	10.00	0	95.9	70	130	9.089	5.32	20	
Aliphatic Hydrocarbon (C10-C12)	11.1	1.50	10.00	0	111	70	130	10.21	8.21	20	
Aromatic Hydrocarbon (C8-C10)	45.2	3.00	40.00	0	113	70	130	44.66	1.29	20	
Aromatic Hydrocarbon (C10-C12)	8.53	0.600	10.00	0	85.3	70	130	9.192	7.46	20	
Aromatic Hydrocarbon (C12-C13)	10.4	7.00	10.00	0	104	70	130	11.52	10.6	20	
Surr: 1,4-Difluorobenzene	2.73		2.500		109	65	140		0		
Surr: Bromofluorobenzene	2.72		2.500		109	65	140		0		

Sample ID: MB-25370		SampType: MBLK			Units: mg/Kg		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: MBLKS		Batch ID: 25370			Analysis Date: 8/1/2019			SeqNo: 1049217				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C5-C6)	ND	1.75		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	2.50		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	1.50		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	3.00		0	0						
Surr: 1,4-Difluorobenzene	2.55		2.500		102	65	140				
Surr: Bromofluorobenzene	2.66		2.500		106	65	140				

Sample ID: 1907338-008BDUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: DP-2(21-22.5)		Batch ID: 25370			Analysis Date: 8/2/2019			SeqNo: 1049209				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C5-C6)	ND	1.96		0	0			0		25	H
Aliphatic Hydrocarbon (C6-C8)	ND	2.81		0	0			0		25	H
Aliphatic Hydrocarbon (C10-C12)	ND	1.68		0	0			0		25	H
Aromatic Hydrocarbon (C8-C10)	ND	3.37		0	0			0		25	H
Surr: 1,4-Difluorobenzene	2.85		2.805		102	65	140		0		H

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: 1907338-008BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 8/1/2019			RunNo: 53100			
Client ID: DP-2(21-22.5)		Batch ID: 25370					Analysis Date: 8/2/2019			SeqNo: 1049209		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Surr: Bromofluorobenzene	2.90		2.805		103	65	140		0		H

Sample ID: LCS-25436		SampType: LCS			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: LCSS		Batch ID: 25436			Analysis Date: 8/8/2019			SeqNo: 1050701				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	9.60	1.40	10.00	0	96.0	70	130				
Aromatic Hydrocarbon (C10-C12)	10.1	0.600	10.00	0	101	70	130				
Aromatic Hydrocarbon (C12-C13)	9.89	7.00	10.00	0	98.9	70	130				
Surr: 1,4-Difluorobenzene	2.66		2.500		107	65	140				
Surr: Bromofluorobenzene	2.54		2.500		101	65	140				

Sample ID: LCSD-25436		SampType: LCSD			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: LCSS02		Batch ID: 25436			Analysis Date: 8/8/2019			SeqNo: 1050703				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	9.83	1.40	10.00	0	98.3	70	130	9.602	2.40	20	
Aromatic Hydrocarbon (C10-C12)	9.64	0.600	10.00	0	96.4	70	130	10.15	5.07	20	
Aromatic Hydrocarbon (C12-C13)	10.1	7.00	10.00	0	101	70	130	9.887	2.36	20	
Surr: 1,4-Difluorobenzene	2.64		2.500		105	65	140		0		
Surr: Bromofluorobenzene	2.49		2.500		99.4	65	140		0		

Sample ID: MB-25436		SampType: MBLK			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: MBLKS		Batch ID: 25436			Analysis Date: 8/8/2019					SeqNo: 1050705		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	ND	1.40		0	0						
Aromatic Hydrocarbon (C10-C12)	ND	0.600		0	0						
Aromatic Hydrocarbon (C12-C13)	ND	7.00		0	0						



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: MB-25436		SampType: MBLK			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: MBLKS		Batch ID: 25436			Analysis Date: 8/8/2019					SeqNo: 1050705		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Sample ID: 1907338-043BDUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 8/8/2019			RunNo: 53165		
Client ID: DP-12(10-11.5)	Batch ID: 25436					Analysis Date: 8/9/2019			SeqNo: 1050692		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	1.49		0	0			0		25	H
Aromatic Hydrocarbon (C10-C12)	ND	0.639		0	0			0		25	H
Aromatic Hydrocarbon (C12-C13)	ND	7.46		0	0			0		25	H
Surr: 1,4-Difluorobenzene	2.60		2.663		97.4	65	140		0		H
Surr: Bromofluorobenzene	2.49		2.663		93.6	65	140		0		H

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Sample Moisture (Percent Moisture)

Sample ID: 1907338-010ADUP	SampType: DUP	Units: wt%			Prep Date: 7/25/2019	RunNo: 52882
Client ID: DP-3(10-11.5)	Batch ID: R52882				Analysis Date: 7/25/2019	SeqNo: 1045085
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Percent Moisture	20.2	0.500			20.38	0.720	20

Sample ID: 1907340-002ADUP	SampType: DUP	Units: wt%			Prep Date: 7/25/2019	RunNo: 52882
Client ID: BATCH	Batch ID: R52882				Analysis Date: 7/25/2019	SeqNo: 1045093
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Percent Moisture	7.08	0.500			6.087	15.1	20

Sample ID: 1908038-001ADUP	SampType: DUP	Units: wt%			Prep Date: 8/2/2019	RunNo: 53032
Client ID: BATCH	Batch ID: R53032				Analysis Date: 8/2/2019	SeqNo: 1047742
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Percent Moisture	5.02	0.500			6.007	17.8	20

Sample ID: 1908034-001ADUP	SampType: DUP	Units: wt%			Prep Date: 8/2/2019	RunNo: 53032
Client ID: BATCH	Batch ID: R53032				Analysis Date: 8/2/2019	SeqNo: 1047750
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual

Percent Moisture	68.9	0.500			67.50	2.09	20

Client Name: **APEX**
 Logged by: **Clare Griggs**

Work Order Number: **1907338**
 Date Received: **7/25/2019 9:49:00 AM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: Date:
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	7.8
Cooler 2	2.4
Sample 1	5.4
Sample 2	3.4
Temp Blank 1	2.8

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

Client Name: **APEX**Work Order Number: **1907338**Logged by: **Clare Griggs**Date Received: **7/25/2019 9:49:00 AM**

Item #	Temp °C
Temp Blank 2	4.8

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338

7/23/19
JS 7/24/19SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

HOLD**Sample Name: DP-1(5-6.5)****Soil****Sampled: 07/18/19 10:25****(A9G0676-01)**

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:25	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(11-12.5)**Soil****Sampled: 07/18/19 10:32****(A9G0676-02)**

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 10:32	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 10:32	
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD**Sample Name: DP-1(15-16.5)****Soil****Sampled: 07/18/19 10:40****(A9G0676-03)**

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:40	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD**Sample Name: DP-1(21-22.5)****Soil****Sampled: 07/18/19 10:50****(A9G0676-04)**

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:50	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking #: 1Z X4720R 019205 4223

Released By  Date 7/24/19

UPS (Shipper)

Received By

Date

UPS (Shipper)

Kayla Peter

7/25/19 0949

Released By Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907330

HOLD

Sample Name: DP-1(27.5-29)

Soil

Sampled: 07/18/19 11:00

(A9G0676-05)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:00	Hold for potential EPH/VPH

Sample Name: DP-2(11-12.5)

Soil

Sampled: 07/18/19 11:15

(A9G0676-06)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub) NWTPH-VPH (Sub) <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/02/19 17:00 08/02/19 17:00	08/01/19 11:15 08/01/19 11:15	

HOLD

Sample Name: DP-2(16.5-18)

Soil

Sampled: 07/18/19 11:20

(A9G0676-07)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:20	Hold for potential EPH/VPH

Sample Name: DP-2(21-22.5)

Soil

Sampled: 07/18/19 11:35

(A9G0676-08)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:35	Hold for potential EPH/VPH

HOLD

Sample Name: DP-2(25-26.5)

Soil

Sampled: 07/18/19 11:40

(A9G0676-09)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:40	Hold for potential EPH/VPH

Standard TAT

Tracking # 12X4720R0192054223

AS

7/24/19

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peterson	7/25/19 6949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

Sample Name: DP-3(10-11.5)

Soil

Sampled: 07/18/19 12:00

(A9G0676-10)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 12:00	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 12:00	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-3(22-23.5)

Soil

Sampled: 07/18/19 12:18

(A9G0676-11)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 12:18	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-4(6.5-8)

Soil

Sampled: 07/19/19 08:20

(A9G0676-12)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:20	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-4(11.5-13)

Soil

Sampled: 07/19/19 08:25

(A9G0676-13)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 1ZX4720R0192054223

Released By	Date	Received By	Date
	7/24/19	Kayla Pete	7/25/19 0949
UPS (Shipper)			
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-5(6-7.5)

Soil

Sampled: 07/19/19 08:47

(A9G0676-15)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 08:47	Hold for potential EPH/VPH

Sample Name: DP-5(10-11.5)

Soil

Sampled: 07/19/19 08:55

(A9G0676-16)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub) NWTPH-VPH (Sub) <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/02/19 17:00 08/02/19 17:00	08/02/19 08:55 08/02/19 08:55	

Sample Name: DP-5(15-16.5)

Soil

Sampled: 07/19/19 09:00

(A9G0676-17)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:00	Hold for potential EPH/VPH

HOLD

Sample Name: DP-6(2-3.5)

Soil

Sampled: 07/19/19 09:10

(A9G0676-18)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:10	Hold for potential EPH/VPH

HOLD

Sample Name: DP-6(6.5-8)

Soil

Sampled: 07/19/19 09:15

(A9G0676-19)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:15	Hold for potential EPH/VPH

Standard TAT Tracking#: 12X4720R0192054223

Released By 	Date 7/24/19	Received By Kayla Peterson	Date 7/25/19 0949
UPS (Shipper)		UPS (Shipper)	

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338 7/23/19

Sample Name: DP-6(12-13.5) **Soil** **Sampled:** 07/19/19 09:20 (A9G0676-20)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:20	Hold for potential EPH/VPH

HOLD

Sample Name: DP-6(17-18.5) **Soil** **Sampled:** 07/19/19 09:25 (A9G0676-21)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:25	Hold for potential EPH/VPH

HOLD

Sample Name: DP-7(1-2.5) **Soil** **Sampled:** 07/19/19 09:30 (A9G0676-22)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:30	Hold for potential EPH/VPH

HOLD

Sample Name: DP-7(6.5-8) **Soil** **Sampled:** 07/19/19 09:35 (A9G0676-23)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:35	Hold for potential EPH/VPH

Sample Name: DP-7(11.5-13) **Soil** **Sampled:** 07/19/19 09:40 (A9G0676-24)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:40	Hold for potential EPH/VPH

Standard TAT Tracking #: 1Z X4720R 0192054223

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Peto	7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-7(16.5-18)

Soil

Sampled: 07/19/19 09:45

(A9G0676-25)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:45

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(1.5-3)

Soil

Sampled: 07/19/19 09:50

(A9G0676-26)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:50

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(6.5-8)

Soil

Sampled: 07/19/19 09:55

(A9G0676-27)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:55

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Sample Name: DP-8(11.5-13)

Soil

Sampled: 07/19/19 09:58

(A9G0676-28)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:58

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(17-18.5)

Soil

Sampled: 07/19/19 10:00

(A9G0676-29)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:00

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Standard TAT Tracking #: 1Z4720E 0192054223
Frag
apx 7/24/19

UPS (Shipper)

Released By

Date

Received By

Date

UPS (Shipper)

Released By

Date

Received By

Date

Kanya Peter

7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-9(1-2.5)

Soil

Sampled: 07/19/19 10:10

(A9G0676-30)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:10	Hold for potential EPH/VPH

HOLD

Sample Name: DP-9(6.5-8)

Soil

Sampled: 07/19/19 10:15

(A9G0676-31)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:15	Hold for potential EPH/VPH

HOLD

Sample Name: DP-9(11-12.5)

Soil

Sampled: 07/19/19 10:20

(A9G0676-32)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:20	Hold for potential EPH/VPH

HOLD

Sample Name: DP-9(16.5-18)

Soil

Sampled: 07/19/19 10:25

(A9G0676-33)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:25	Hold for potential EPH/VPH

HOLD

Sample Name: DP-10(1.5-3)

Soil

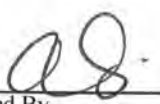
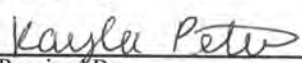
Sampled: 07/19/19 10:30

(A9G0676-34)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:30	Hold for potential EPH/VPH

Standard TAT

Tracking#1Z44720R0192054223

Released By	Date	Received By	Date
	7/24/19		7/25/19 0949
UPS (Shipper)		UPS (Shipper)	

Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

4oz Jar Reads BCSAmerica-1-01-2 on Project 8

Sample Name: DP-10(6-7.5)

Soil

Sampled: 07/19/19 10:35

(A9G0676-35)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:35	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(11.5-13)

Soil

Sampled: 07/19/19 10:40

(A9G0676-36)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(16.5-18)

Soil

Sampled: 07/19/19 10:45

(A9G0676-37)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:45	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Label Reads DP-11(5-7.5) on Jars.

Sample Name: DP-11(6-7.5)

Soil

Sampled: 07/19/19 10:50

(A9G0676-38)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:50	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:50	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-11(10-11.5)

Soil

Sampled: 07/19/19 10:55

(A9G0676-39)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:55	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking #: 1Z X4720R 0192 054223

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Peter	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-11(16.5-18)

Soil

Sampled: 07/19/19 11:00

(A9G0676-40)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(0.5-2)

Soil

Sampled: 07/19/19 11:10

(A9G0676-41)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-12(5-6.5)

Soil

Sampled: 07/19/19 11:15

(A9G0676-42)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:15	✓
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:15	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(10-11.5)

Soil

Sampled: 07/19/19 11:20

(A9G0676-43)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(16.5-18)

Soil

Sampled: 07/19/19 11:25

(A9G0676-44)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:25	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1ZEX472OR0192054223

Released By	Date	Received By	Date
	7/24/19		7/25/19 0949
UPS (Shipper)			

Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-13(1.5-3)

Soil

Sampled: 07/19/19 11:30

(A9G0676-45)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:30	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-13(5-6.5)

Soil

Sampled: 07/19/19 11:35

(A9G0676-46)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:35	
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-13(10-11.5)

Soil

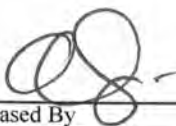
Sampled: 07/19/19 11:40

(A9G0676-47)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:40	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1Z4720R0192054223

	7/24/19	UPS (Shipper)	
Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peters	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338

7/22/19
JS 7/24/19SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

edits per PN 7 8/1/2019 pm

HOLD			
Sample Name: DP-1(5-6.5)	Soil	Sampled: 07/18/19 10:25	(A9G0676-01)
Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(11-12.5)	Soil	Sampled: 07/18/19 10:32	(A9G0676-02)
Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 10:32	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 10:32	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD			
Sample Name: DP-1(15-16.5)	Soil	Sampled: 07/18/19 10:40	(A9G0676-03)
Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD			
Sample Name: DP-1(21-22.5)	Soil	Sampled: 07/18/19 10:50	(A9G0676-04)
Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:50	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking# 1Z X4720R 0192054223

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Peter	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

HOLD

Sample Name: DP-1(27.5-29)

Soil

Sampled: 07/18/19 11:00

(A9G0676-05)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-2(11-12.5)

Soil

Sampled: 07/18/19 11:15

(A9G0676-06)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 11:15	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 11:15	
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-2(16.5-18)

Soil

Sampled: 07/18/19 11:20

(A9G0676-07)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-2(21-22.5)

Soil

Sampled: 07/18/19 11:35

(A9G0676-08)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:35	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-2(25-26.5)

Soil

Sampled: 07/18/19 11:40

(A9G0676-09)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:40	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking# 12X4720R0192054223

as

7/24/19

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peterson	7/25/19 6949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

Sample Name: DP-3(10-11.5)

Soil

Sampled: 07/18/19 12:00

(A9G0676-10)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 12:00	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 12:00	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-3(22-23.5)

Soil

Sampled: 07/18/19 12:18

(A9G0676-11)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 12:18	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-4(6.5-8)

Soil

Sampled: 07/19/19 08:20

(A9G0676-12)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:20	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-4(11.5-13)

Soil

Sampled: 07/19/19 08:25

(A9G0676-13)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-4(16.5-18)

Soil

Sampled: 07/19/19 08:30

(A9G0676-14)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:30	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 12X4720R0192054223

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Pete	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-5(6-7.5)

Soil

Sampled: 07/19/19 08:47

(A9G0676-15)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:47	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-5(10-11.5)

Soil

Sampled: 07/19/19 08:55

(A9G0676-16)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 08:55	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 08:55	✓
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-5(15-16.5)

Soil

Sampled: 07/19/19 09:00

(A9G0676-17)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(2-3.5)

Soil

Sampled: 07/19/19 09:10

(A9G0676-18)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(6.5-8)

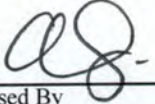
Soil

Sampled: 07/19/19 09:15

(A9G0676-19)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:15	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 1Z X4720R01 92054223

Released By	Date	Received By	Date
	7/24/19	UPS (Shipper)	
		Kayla Peterson	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338 7/23/19

Sample Name: DP-6(12-13.5) Soil Sampled: 07/19/19 09:20 (A9G0676-20)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:20	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(17-18.5) Soil Sampled: 07/19/19 09:25 (A9G0676-21)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-7(1-2.5) Soil Sampled: 07/19/19 09:30 (A9G0676-22)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:30	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-7(6.5-8) Soil Sampled: 07/19/19 09:35 (A9G0676-23)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:35	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-7(11.5-13) Soil Sampled: 07/19/19 09:40 (A9G0676-24)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking #: 1Z X4720R 0192054223

Released By	7/24/19	Received By	7/25/19 0949
UPS (Shipper)		Kayla Peto	

Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-7(16.5-18)

Soil

Sampled: 07/19/19 09:45

(A9G0676-25)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:45

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(1.5-3)

Soil

Sampled: 07/19/19 09:50

(A9G0676-26)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:50

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(6.5-8)

Soil

Sampled: 07/19/19 09:55

(A9G0676-27)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:55

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(11.5-13)

Soil

Sampled: 07/19/19 09:58

(A9G0676-28)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:58

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(17-18.5)

Soil

Sampled: 07/19/19 10:00

(A9G0676-29)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:00

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Standard TAT Tracking #: 1ZX4720R 0192054223
Frage
apx7/24/19

UPS (Shipper)

Released By

Date

Received By

Date

UPS (Shipper)

Released By

Date

Received By

Date

Kayla Peter

7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-9(1-2.5)

Soil

Sampled: 07/19/19 10:10

(A9G0676-30)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:10

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-9(6.5-8)

Soil

Sampled: 07/19/19 10:15

(A9G0676-31)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:15

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-9(11-12.5)

Soil

Sampled: 07/19/19 10:20

(A9G0676-32)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:20

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-9(16.5-18)

Soil

Sampled: 07/19/19 10:25

(A9G0676-33)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:25

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-10(1.5-3)

Soil

Sampled: 07/19/19 10:30

(A9G0676-34)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:30

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Standard TAT

Tracking#1Z X4720R0192054223

Released By
Date
UPS (Shipper)

7/24/19

Date

UPS (Shipper)

Received By

Date

Kaylee Peter

7/25/19 0949

Released By

Date

Received By

Date

Page 49 of 53

Page 7 of 10

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

4oz Jar Reads BCSAmerica-1-01-2 on Project s

Sample Name: DP-10(6-7.5)

Soil

Sampled: 07/19/19 10:35

(A9G0676-35)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:35	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(11.5-13)

Soil

Sampled: 07/19/19 10:40

(A9G0676-36)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(16.5-18)

Soil

Sampled: 07/19/19 10:45

(A9G0676-37)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:45	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Label Reads DP-11(5-7.5) on Jars.

Sample Name: DP-11(6-7.5)

Soil

Sampled: 07/19/19 10:50

(A9G0676-38)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:50	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:50	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-11(10-11.5)

Soil

Sampled: 07/19/19 10:55

(A9G0676-39)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:55	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Run EPH & VPH

Standard TAT

Tracking #: 1Z X472DR 0192 054223

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Peter	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-11(16.5-18)

Soil

Sampled: 07/19/19 11:00

(A9G0676-40)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(0.5-2)

Soil

Sampled: 07/19/19 11:10

(A9G0676-41)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-12(5-6.5)

Soil

Sampled: 07/19/19 11:15

(A9G0676-42)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:15	✓
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:15	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(10-11.5)

Soil

Sampled: 07/19/19 11:20

(A9G0676-43)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(16.5-18)

Soil

Sampled: 07/19/19 11:25

(A9G0676-44)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:25	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1Z X472 0R 0192 054223

Released By

UPS (Shipper)

Date

Received By

Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-13(1.5-3)

Soil

Sampled: 07/19/19 11:30

(A9G0676-45)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:30	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-13(5-6.5)

Soil

Sampled: 07/19/19 11:35

(A9G0676-46)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:35	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-13(10-11.5)

Soil

Sampled: 07/19/19 11:40

(A9G0676-47)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			Run EPH & VPH
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1ZK4720R0192054223

Released By

Date

Received By

Date

UPS (Shipper)

UPS (Shipper)

Released By

Date

Received By

Date

Kayla Peters

7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338

7/25/19
JS 7/24/19SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

VPH - carbon ranges
only per PN 8/11/19 pm

edits per PN 7 8/1/2019 pm

Sample Name: DP-1(5-6.5)

HOLD

Soil Sampled: 07/18/19 10:25 (A9G0676-01)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:25	Hold for potential EPH/VPH
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(11-12.5)

Soil Sampled: 07/18/19 10:32 (A9G0676-02)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 10:32	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 10:32	
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(15-16.5)

HOLD

Soil Sampled: 07/18/19 10:40 (A9G0676-03)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(21-22.5)

HOLD

Soil Sampled: 07/18/19 10:50 (A9G0676-04)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:50	Hold for potential EPH/VPH
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking # 12 X4720R 0192054223

UPS (Shipper)

Released By

Date

UPS (Shipper)

Received By

Date

Kayla Peter

7/25/19 0949

Released By

Date

Received By

Date



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

Thursday, August 29, 2019

Kyle Haggart

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

RE: A9G0664 - BCSAmerica-1-01-02 - [none]

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 A9G0664, which was received by the laboratory on 7/19/2019 at 3:03:00PM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1

2.5 degC

Cooler #2

1.0 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

Philip Nerenberg, Lab Director

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



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-GW-1	A9G0664-01	Water	07/18/19 10:00	07/19/19 15:03
DP-3W	A9G0664-02	Water	07/18/19 14:55	07/19/19 15:03
DP-2W	A9G0664-03	Water	07/18/19 16:35	07/19/19 15:03
DP-1W	A9G0664-04	Water	07/18/19 18:08	07/19/19 15:03
TP-GW-2	A9G0664-05	Water	07/18/19 12:00	07/19/19 15:03

Apex Laboratories

Philip Nerenberg, Lab Director

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AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL CASE NARRATIVE

Work Order: A9G0664

Amended Report Revision 1:

This report supersedes all previous reports.

Analysis of dissolved metals were added after the previous report version had been completed.

Philip Nerenberg

Lab Director

8/29/19

Apex Laboratories

A handwritten signature in black ink that reads "Philip Nerenberg".

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.

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

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
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071238			
Diesel	ND	0.0943	0.189	mg/L	1	07/25/19 01:22	NWTPH-Dx	
Oil	ND	0.189	0.377	mg/L	1	07/25/19 01:22	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/25/19 01:22</i>	<i>NWTPH-Dx</i>	
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071238			
Diesel	ND	0.0943	0.189	mg/L	1	07/25/19 01:45	NWTPH-Dx	
Oil	ND	0.189	0.377	mg/L	1	07/25/19 01:45	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/25/19 01:45</i>	<i>NWTPH-Dx</i>	
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071238			
Diesel	ND	0.0943	0.189	mg/L	1	07/25/19 02:08	NWTPH-Dx	
Oil	ND	0.189	0.377	mg/L	1	07/25/19 02:08	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 91 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/25/19 02:08</i>	<i>NWTPH-Dx</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

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
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071122			
Gasoline Range Organics	0.0588	0.0500	0.100	mg/L	1	07/22/19 16:02	NWTPH-Gx (MS)	J
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	95 %	Limits:	50-150 %	1	07/22/19 16:02	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			86 %		50-150 %	1	07/22/19 16:02	NWTPH-Gx (MS)
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071122			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/22/19 15:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	94 %	Limits:	50-150 %	1	07/22/19 15:05	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			86 %		50-150 %	1	07/22/19 15:05	NWTPH-Gx (MS)
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/22/19 15:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	93 %	Limits:	50-150 %	1	07/22/19 15:34	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			84 %		50-150 %	1	07/22/19 15:34	NWTPH-Gx (MS)

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-1 (A9G0664-01)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Benzene	ND	0.100	0.200	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-1 (A9G0664-01)				Matrix: Water		Batch: 9071122		
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 14:08	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-1 (A9G0664-01)		Matrix: Water			Batch: 9071122			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 96 %	Limits: 80-120 %	1	07/22/19 14:08	EPA 8260C		
Toluene-d8 (Surr)		100 %	80-120 %	1	07/22/19 14:08	EPA 8260C		
4-Bromofluorobenzene (Surr)		103 %	80-120 %	1	07/22/19 14:08	EPA 8260C		
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 16:02	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071122			
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 16:02	EPA 8260C	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 16:02	EPA 8260C	
Tetrachloroethene (PCE)	16.6	0.200	0.400	ug/L	1	07/22/19 16:02	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 16:02	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/22/19 16:02</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 16:02</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 16:02</i>	<i>EPA 8260C</i>	
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 15:05	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.9450 SW Commerce Circle
Wilsonville, OR 97070Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071122			
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 15:05	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:05	EPA 8260C	
Tetrachloroethene (PCE)	10.5	0.200	0.400	ug/L	1	07/22/19 15:05	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:05	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %	1	07/22/19 15:05	EPA 8260C	
Toluene-d8 (Surr)		98 %		80-120 %	1	07/22/19 15:05	EPA 8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/22/19 15:05	EPA 8260C	

DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 15:34	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 15:34	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:34	EPA 8260C	
Tetrachloroethene (PCE)	0.601	0.200	0.400	ug/L	1	07/22/19 15:34	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	

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Philip Nerenberg

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.9450 SW Commerce Circle
Wilsonville, OR 97070Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:34	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/22/19 15:34</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 15:34</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 15:34</i>	<i>EPA 8260C</i>	
TP-GW-2 (A9G0664-05)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Benzene	ND	0.100	0.200	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-2 (A9G0664-05)		Matrix: Water			Batch: 9071122			
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 14:37	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-2 (A9G0664-05)		Matrix: Water			Batch: 9071122			
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>		<i>97 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/22/19 14:37</i>	<i>EPA 8260C</i>
<i>Toluene-d8 (Surr)</i>				<i>99 %</i>	<i>80-120 %</i>	<i>1</i>	<i>07/22/19 14:37</i>	<i>EPA 8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>100 %</i>	<i>80-120 %</i>	<i>1</i>	<i>07/22/19 14:37</i>	<i>EPA 8260C</i>

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)				Matrix: Water		Batch: 9080549		
Benzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Toluene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
cis-1,2-Dichloroethene	0.651	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Naphthalene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Trichloroethene (TCE)	0.909	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 70-130 %	1	08/01/19 16:01	EPA 8260C SIM	
Toluene-d8 (Surr)		100 %		70-130 %	1	08/01/19 16:01	EPA 8260C SIM	
4-Bromofluorobenzene (Surr)		98 %		70-130 %	1	08/01/19 16:01	EPA 8260C SIM	

DP-2W (A9G0664-03)**Matrix: Water****Batch: 9080549**

Benzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM
Toluene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM
Ethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM
m,p-Xylene	ND	0.100	0.200	ug/L	1	08/01/19 16:55	EPA 8260C SIM

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.9450 SW Commerce Circle
Wilsonville, OR 97070Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9080549			
o-Xylene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
cis-1,2-Dichloroethene	1.49	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
trans-1,2-Dichloroethene	0.0181	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	J
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Naphthalene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Trichloroethene (TCE)	1.86	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	103 %	Limits:	70-130 %	1	08/01/19 16:55	EPA 8260C SIM
Toluene-d8 (Surr)			101 %		70-130 %	1	08/01/19 16:55	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			98 %		70-130 %	1	08/01/19 16:55	EPA 8260C SIM

DP-1W (A9G0664-04)		Matrix: Water			Batch: 9080549			
Benzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Toluene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)				Matrix: Water		Batch: 9080549		
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Naphthalene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 70-130 %	1	08/01/19 17:49	EPA 8260C SIM	
Toluene-d8 (Surr)		100 %		70-130 %	1	08/01/19 17:49	EPA 8260C SIM	
4-Bromofluorobenzene (Surr)		99 %		70-130 %	1	08/01/19 17:49	EPA 8260C SIM	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071362		C-07	
Aroclor 1016	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1221	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1232	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1242	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1248	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1254	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1260	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 91 %		Limits: 40-135 %	1	07/30/19 10:07	EPA 8082A	
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071362		C-07	
Aroclor 1016	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1221	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1232	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1242	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1248	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1254	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1260	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 81 %		Limits: 40-135 %	1	07/30/19 10:24	EPA 8082A	
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071362		C-07	
Aroclor 1016	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1221	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1232	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1242	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1248	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1254	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1260	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 87 %		Limits: 40-135 %	1	07/30/19 10:07	EPA 8082A	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02RE2)				Matrix: Water		Batch: 9071208		
Acenaphthene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Acenaphthylene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Anthracene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Benz(a)anthracene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(a)pyrene	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Chrysene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Fluoranthene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Fluorene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/24/19 19:04	EPA 8270D	
Naphthalene	ND	0.0189	0.0377	ug/L	1	07/24/19 19:04	EPA 8270D	
Phenanthrene	0.0154	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	J
Pyrene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Carbazole	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Dibenzofuran	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Chlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dichlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dimethylphenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dinitrophenol	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Methylphenol	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
Phenol	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02RE2)				Matrix: Water		Batch: 9071208		
2,3,5,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Butyl benzyl phthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Diethylphthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Dimethylphthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Di-n-butylphthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Di-n-octyl phthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachlorobenzene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachlorobutadiene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachloroethane	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Chloronaphthalene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Aniline	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Chloroaniline	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Nitroaniline	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
3-Nitroaniline	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Nitroaniline	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Nitrobenzene	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
DP-3W (A9G0664-02RE2)				Matrix: Water		Batch: 9071208			
2,6-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	Q-52	
Benzoic acid	ND	1.18	2.36	ug/L	1	07/24/19 19:04	EPA 8270D		
Benzyl alcohol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D		
Isophorone	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D		
Azobenzene (1,2-DPH)	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D		
Bis(2-Ethylhexyl) adipate	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D		
3,3'-Dichlorobenzidine	ND	0.472	0.943	ug/L	1	07/24/19 19:04	EPA 8270D		
1,2-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D		
1,3-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D		
1,4-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	Q-41	
Pyridine	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D		
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:	41 %	Limits:	44-120 %	1	07/24/19 19:04		EPA 8270D
2-Fluorobiphenyl (Surr)			45 %		44-120 %	1	07/24/19 19:04		EPA 8270D
Phenol-d6 (Surr)			13 %		10-120 %	1	07/24/19 19:04		EPA 8270D
p-Terphenyl-d14 (Surr)			73 %		50-133 %	1	07/24/19 19:04		EPA 8270D
2-Fluorophenol (Surr)			22 %		19-120 %	1	07/24/19 19:04		EPA 8270D
2,4,6-Tribromophenol (Surr)			72 %		43-140 %	1	07/24/19 19:04	EPA 8270D	
DP-2W (A9G0664-03RE2)				Matrix: Water		Batch: 9071294			
Acenaphthene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Acenaphthylene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Anthracene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Benz(a)anthracene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Benzo(a)pyrene	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D		
Benzo(b)fluoranthene	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D		
Benzo(k)fluoranthene	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D		
Benzo(g,h,i)perylene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Chrysene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Dibenz(a,h)anthracene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Fluoranthene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Fluorene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
Indeno(1,2,3-cd)pyrene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D		
1-Methylnaphthalene	ND	0.0748	0.150	ug/L	4	07/26/19 11:35	EPA 8270D		
2-Methylnaphthalene	ND	0.0748	0.150	ug/L	4	07/26/19 11:35	EPA 8270D		

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03RE2)				Matrix: Water		Batch: 9071294		
Naphthalene	ND	0.0748	0.150	ug/L	4	07/26/19 11:35	EPA 8270D	
Phenanthrene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Pyrene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Carbazole	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D	
Dibenzofuran	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Chlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dichlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dimethylphenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dinitrophenol	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Methylphenol	ND	0.187	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Nitrophenol	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Nitrophenol	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Phenol	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Butyl benzyl phthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Diethylphthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Dimethylphthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Di-n-butylphthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Di-n-octyl phthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03RE2)		Matrix: Water			Batch: 9071294			
Hexachlorobenzene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Hexachlorobutadiene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
Hexachloroethane	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Chloronaphthalene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Aniline	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Chloroaniline	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Nitroaniline	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
3-Nitroaniline	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Nitroaniline	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Nitrobenzene	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dinitrotoluene	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
2,6-Dinitrotoluene	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzoic acid	ND	4.67	9.35	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzyl alcohol	9.54	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Isophorone	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
3,3'-Dichlorobenzidine	ND	1.87	3.74	ug/L	4	07/26/19 11:35	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
1,3-Dinitrobenzene	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
1,4-Dinitrobenzene	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
Pyridine	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:	40 %	Limits:	44-120 %	4	07/26/19 11:35	EPA 8270D S-06
2-Fluorobiphenyl (Surr)			46 %		44-120 %	4	07/26/19 11:35	EPA 8270D
Phenol-d6 (Surr)			14 %		10-120 %	4	07/26/19 11:35	EPA 8270D
p-Terphenyl-d14 (Surr)			67 %		50-133 %	4	07/26/19 11:35	EPA 8270D
2-Fluorophenol (Surr)			22 %		19-120 %	4	07/26/19 11:35	EPA 8270D

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03RE2)				Matrix: Water		Batch: 9071294		
<i>Surrogate: 2,4,6-Tribromophenol (Surr)</i>		<i>Recovery: 65 %</i>	<i>Limits: 43-140 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>		
DP-1W (A9G0664-04RE1)				Matrix: Water		Batch: 9071208		
Acenaphthene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Acenaphthylene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Anthracene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Benz(a)anthracene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(a)pyrene	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Chrysene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Fluoranthene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Fluorene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
1-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	07/24/19 19:40	EPA 8270D	
Naphthalene	ND	0.0187	0.0374	ug/L	1	07/24/19 19:40	EPA 8270D	
Phenanthrene	0.00976	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	J
Pyrene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Carbazole	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Dibenzofuran	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Chlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dichlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dimethylphenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dinitrophenol	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Methylphenol	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Nitrophenol	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Nitrophenol	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	

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Philip Nerenberg, Lab Director



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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04RE1)		Matrix: Water			Batch: 9071208			
Phenol	0.207	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	J
2,3,4,6-Tetrachlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Butyl benzyl phthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Diethylphthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Dimethylphthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Di-n-butylphthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Di-n-octyl phthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachlorobenzene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachlorobutadiene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachloroethane	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Chloronaphthalene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Aniline	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Chloroaniline	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Nitroaniline	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
3-Nitroaniline	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Nitroaniline	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	

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Philip Nerenberg

Philip Nerenberg, Lab Director



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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04RE1)		Matrix: Water			Batch: 9071208			
Nitrobenzene	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzoic acid	2.08	1.17	2.34	ug/L	1	07/24/19 19:40	EPA 8270D	J
Benzyl alcohol	0.524	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
Isophorone	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.467	0.935	ug/L	1	07/24/19 19:40	EPA 8270D	
1,2-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,3-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,4-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
Pyridine	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	<i>41 %</i>	<i>Limits:</i>	<i>44-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>2-Fluorobiphenyl (Surr)</i>			<i>45 %</i>		<i>44-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>Phenol-d6 (Surr)</i>			<i>15 %</i>		<i>10-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>p-Terphenyl-d14 (Surr)</i>			<i>65 %</i>		<i>50-133 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>2-Fluorophenol (Surr)</i>			<i>21 %</i>		<i>19-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>2,4,6-Tribromophenol (Surr)</i>			<i>82 %</i>		<i>43-140 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02) Matrix: Water								
Batch: 9071319								
Antimony	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Arsenic	0.647	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	J
Beryllium	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Chromium	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Copper	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/31/19 17:34	EPA 6020A	
Nickel	9.49	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Selenium	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Silver	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Thallium	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Zinc	ND	2.00	4.00	ug/L	1	07/31/19 17:34	EPA 6020A	
DP-2W (A9G0664-03) Matrix: Water								
Batch: 9071319								
Antimony	ND	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Arsenic	1.19	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Beryllium	ND	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Chromium	0.791	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	J
Copper	1.20	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Lead	0.237	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/31/19 17:38	EPA 6020A	
Nickel	2.56	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Selenium	ND	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Silver	ND	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Thallium	ND	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Zinc	4.03	2.00	4.00	ug/L	1	07/31/19 17:38	EPA 6020A	
DP-1W (A9G0664-04) Matrix: Water								
Batch: 9071319								
Antimony	ND	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)		Matrix: Water						
Arsenic	9.61	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Beryllium	ND	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Cadmium	0.0577	0.0400	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	J
Chromium	0.713	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	J
Copper	10.2	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Lead	0.720	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Mercury	0.108	0.0400	0.0800	ug/L	1	07/31/19 18:05	EPA 6020A	
Nickel	8.35	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Selenium	ND	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Silver	ND	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Thallium	ND	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Zinc	9.10	2.00	4.00	ug/L	1	07/31/19 18:05	EPA 6020A	

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water						
Batch: 9081139								
Arsenic	0.525	0.500	1.00	ug/L	1	08/21/19 18:40	EPA 6020A (Diss)	J
Copper	ND	0.500	1.00	ug/L	1	08/21/19 18:40	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	08/21/19 18:40	EPA 6020A (Diss)	
DP-2W (A9G0664-03)		Matrix: Water						
Batch: 9081139								
Arsenic	1.15	0.500	1.00	ug/L	1	08/21/19 18:44	EPA 6020A (Diss)	
DP-1W (A9G0664-04)		Matrix: Water						
Batch: 9081139								
Arsenic	9.17	0.500	1.00	ug/L	1	08/21/19 18:48	EPA 6020A (Diss)	

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503-718-2323

EPA ID: OR01039**AMENDED REPORT****GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****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 9071238 - EPA 3510C (Fuels/Acid Ext.)						Water							
Blank (9071238-BLK1)			Prepared: 07/24/19 12:59 Analyzed: 07/24/19 23:29										
NWTPH-Dx													
Diesel	ND	0.0909	0.182	mg/L	1	---	---	---	---	---	---		
Oil	ND	0.182	0.364	mg/L	1	---	---	---	---	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x							
LCS (9071238-BS1)			Prepared: 07/24/19 12:59 Analyzed: 07/24/19 23:52										
NWTPH-Dx													
Diesel	1.17	0.100	0.200	mg/L	1	1.25	---	93	58-115%	---	---		
Surr: o-Terphenyl (Surr)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x							
LCS Dup (9071238-BSD1)			Prepared: 07/24/19 12:59 Analyzed: 07/25/19 00:14										Q-19
NWTPH-Dx													
Diesel	1.19	0.100	0.200	mg/L	1	1.25	---	95	58-115%	2	20%		
Surr: o-Terphenyl (Surr)		Recovery: 103 %		Limits: 50-150 %		Dilution: 1x							

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**AMENDED REPORT****GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****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 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)			Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:52									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		80 %		50-150 %		"						
LCS (9071122-BS2)			Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:24									
NWTPH-Gx (MS)												
Gasoline Range Organics	0.485	0.0500	0.100	mg/L	1	0.500	---	97	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		95 %		50-150 %		"						
Duplicate (9071122-DUP1)			Prepared: 07/22/19 11:05 Analyzed: 07/22/19 18:24									V-01
QC Source Sample: Non-SDG (A9G0649-01)												
Gasoline Range Organics	1.78	0.500	1.00	mg/L	10	---	1.71	---	---	4	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		85 %		50-150 %		"						

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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)			Prepared: 07/22/19 07:00		Analyzed: 07/22/19 09:52							
EPA 8260C												
Acetone	ND	20.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)						Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:52						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	1.50	3.00	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 95 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

Philip Nerenberg

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)			Prepared: 07/22/19 07:00		Analyzed: 07/22/19 09:52							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						
LCS (9071122-BS1)			Prepared: 07/22/19 07:00		Analyzed: 07/22/19 08:55							
EPA 8260C												
Acetone	26.5	20.0	20.0	ug/L	1	40.0	---	66	80-120%	---	---	Q-55
Acrylonitrile	16.6	1.00	2.00	ug/L	1	20.0	---	83	80-120%	---	---	
Benzene	17.2	0.100	0.200	ug/L	1	20.0	---	86	80-120%	---	---	
Bromobenzene	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Bromochloromethane	16.5	0.500	1.00	ug/L	1	20.0	---	82	80-120%	---	---	
Bromodichloromethane	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Bromoform	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
Bromomethane	16.8	5.00	5.00	ug/L	1	20.0	---	84	80-120%	---	---	
2-Butanone (MEK)	32.3	5.00	10.0	ug/L	1	40.0	---	81	80-120%	---	---	
n-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
sec-Butylbenzene	23.1	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
tert-Butylbenzene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Carbon disulfide	18.4	5.00	10.0	ug/L	1	20.0	---	92	80-120%	---	---	
Carbon tetrachloride	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Chlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Chloroethane	17.6	5.00	5.00	ug/L	1	20.0	---	88	80-120%	---	---	
Chloroform	19.1	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Chloromethane	16.0	2.50	5.00	ug/L	1	20.0	---	80	80-120%	---	---	
2-Chlorotoluene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
4-Chlorotoluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Dibromochloromethane	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.5	2.50	5.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Dibromomethane	18.5	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,3-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,4-Dichlorobenzene	20.3	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Dichlorodifluoromethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,1-Dichloroethane	17.5	0.200	0.400	ug/L	1	20.0	---	87	80-120%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
LCS (9071122-BS1)						Prepared: 07/22/19 07:00 Analyzed: 07/22/19 08:55						
1,2-Dichloroethane (EDC)	18.8	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
1,1-Dichloroethene	17.7	0.200	0.400	ug/L	1	20.0	---	89	80-120%	---	---	
cis-1,2-Dichloroethene	17.6	0.200	0.400	ug/L	1	20.0	---	88	80-120%	---	---	
trans-1,2-Dichloroethene	17.9	0.200	0.400	ug/L	1	20.0	---	89	80-120%	---	---	
1,2-Dichloropropane	16.3	0.250	0.500	ug/L	1	20.0	---	81	80-120%	---	---	
1,3-Dichloropropane	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
2,2-Dichloropropane	23.1	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
1,1-Dichloropropene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
cis-1,3-Dichloropropene	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
trans-1,3-Dichloropropene	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Ethylbenzene	22.2	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
Hexachlorobutadiene	22.9	2.50	5.00	ug/L	1	20.0	---	115	80-120%	---	---	
2-Hexanone	35.1	5.00	10.0	ug/L	1	40.0	---	88	80-120%	---	---	
Isopropylbenzene	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
4-Isopropyltoluene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Methylene chloride	18.0	1.50	3.00	ug/L	1	20.0	---	90	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	35.2	5.00	10.0	ug/L	1	40.0	---	88	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Naphthalene	26.3	1.00	2.00	ug/L	1	20.0	---	132	80-120%	---	---	Q-56
n-Propylbenzene	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Styrene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,1,1,2-Tetrachloroethane	22.7	0.200	0.400	ug/L	1	20.0	---	114	80-120%	---	---	
1,1,2,2-Tetrachloroethane	16.8	0.250	0.500	ug/L	1	20.0	---	84	80-120%	---	---	
Tetrachloroethene (PCE)	23.2	0.200	0.400	ug/L	1	20.0	---	116	80-120%	---	---	
Toluene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	24.1	1.00	2.00	ug/L	1	20.0	---	120	80-120%	---	---	
1,2,4-Trichlorobenzene	27.1	1.00	2.00	ug/L	1	20.0	---	135	80-120%	---	---	Q-56
1,1,1-Trichloroethane	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,2-Trichloroethane	18.9	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Trichloroethene (TCE)	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
Trichlorofluoromethane	22.3	1.00	2.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,2,3-Trichloropropane	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	23.1	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
1,3,5-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
LCS (9071122-BS1)			Prepared: 07/22/19 07:00		Analyzed: 07/22/19 08:55							
Vinyl chloride	17.0	0.200	0.400	ug/L	1	20.0	---	85	80-120%	---	---	
m,p-Xylene	47.8	0.500	1.00	ug/L	1	40.0	---	119	80-120%	---	---	
o-Xylene	23.0	0.250	0.500	ug/L	1	20.0	---	115	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (9071122-DUP1)

Prepared: 07/22/19 11:05 Analyzed: 07/22/19 18:24

V-01

QC Source Sample: Non-SDG (A9G0649-01)

Acetone	ND	200	200	ug/L	10	---	ND	---	---	---	30%
Acrylonitrile	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%
Benzene	2.21	1.00	2.00	ug/L	10	---	2.27	---	---	3	30%
Bromobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Bromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromodichloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromoform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromomethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%
n-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
sec-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
tert-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Carbon disulfide	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%
Carbon tetrachloride	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Chlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Chloroethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%
Chloroform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Chloromethane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%
2-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
4-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Dibromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Dibromomethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%

Apex Laboratories

Philip Nerenberg

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Duplicate (9071122-DUP1)			Prepared: 07/22/19 11:05		Analyzed: 07/22/19 18:24		V-01					
QC Source Sample: Non-SDG (A9G0649-01)												
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	17.1	2.50	5.00	ug/L	10	---	17.0	---	---	0.4	30%	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Hexanone	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Methylene chloride	ND	15.0	30.0	ug/L	10	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	34.8	10.0	20.0	ug/L	10	---	30.6	---	---	13	30%	Q-54
n-Propylbenzene	8.44	2.50	5.00	ug/L	10	---	7.96	---	---	6	30%	
Styrene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B												
Water												
Duplicate (9071122-DUP1)												
Prepared: 07/22/19 11:05 Analyzed: 07/22/19 18:24												
QC Source Sample: Non-SDG (A9G0649-01)												
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	94.0	5.00	10.0	ug/L	10	---	88.4	---	---	6	30%	
1,3,5-Trimethylbenzene	28.9	5.00	10.0	ug/L	10	---	27.0	---	---	7	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
m,p-Xylene	41.8	5.00	10.0	ug/L	10	---	40.8	---	---	2	30%	
o-Xylene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr) Recovery: 97 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr) 100 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr) 97 % 80-120 % "</i>												
Matrix Spike (9071122-MS1)												
Prepared: 07/22/19 11:05 Analyzed: 07/22/19 16:31												
QC Source Sample: DP-3W (A9G0664-02)												
EPA 8260C												
Acetone	28.6	20.0	20.0	ug/L	1	40.0	ND	72	39-160%	---	---	Q-54b
Acrylonitrile	17.2	1.00	2.00	ug/L	1	20.0	ND	86	63-135%	---	---	
Benzene	18.1	0.100	0.200	ug/L	1	20.0	ND	90	79-120%	---	---	
Bromobenzene	18.9	0.250	0.500	ug/L	1	20.0	ND	94	80-120%	---	---	
Bromochloromethane	17.9	0.500	1.00	ug/L	1	20.0	ND	90	78-123%	---	---	
Bromodichloromethane	19.7	0.500	1.00	ug/L	1	20.0	ND	99	79-125%	---	---	
Bromoform	22.2	0.500	1.00	ug/L	1	20.0	ND	111	66-130%	---	---	
Bromomethane	13.0	5.00	5.00	ug/L	1	20.0	ND	65	53-141%	---	---	
2-Butanone (MEK)	31.0	5.00	10.0	ug/L	1	40.0	ND	77	56-143%	---	---	
n-Butylbenzene	21.1	0.500	1.00	ug/L	1	20.0	ND	105	75-128%	---	---	
sec-Butylbenzene	22.6	0.500	1.00	ug/L	1	20.0	ND	113	77-126%	---	---	
tert-Butylbenzene	21.9	0.500	1.00	ug/L	1	20.0	ND	110	78-124%	---	---	
Carbon disulfide	20.3	5.00	10.0	ug/L	1	20.0	ND	101	64-133%	---	---	
Carbon tetrachloride	21.2	0.500	1.00	ug/L	1	20.0	ND	106	72-136%	---	---	
Chlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
Chloroethane	19.6	5.00	5.00	ug/L	1	20.0	ND	98	60-138%	---	---	
Chloroform	19.9	0.500	1.00	ug/L	1	20.0	ND	99	79-124%	---	---	
Chloromethane	19.2	2.50	5.00	ug/L	1	20.0	ND	96	50-139%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Matrix Spike (9071122-MS1)			Prepared: 07/22/19 11:05		Analyzed: 07/22/19 16:31							
QC Source Sample: DP-3W (A9G0664-02)												
2-Chlorotoluene	20.4	0.500	1.00	ug/L	1	20.0	ND	102	79-122%	---	---	
4-Chlorotoluene	20.9	0.500	1.00	ug/L	1	20.0	ND	105	78-122%	---	---	
Dibromochloromethane	22.0	0.500	1.00	ug/L	1	20.0	ND	110	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.3	2.50	5.00	ug/L	1	20.0	ND	91	62-128%	---	---	
1,2-Dibromoethane (EDB)	20.7	0.250	0.500	ug/L	1	20.0	ND	104	77-121%	---	---	
Dibromomethane	19.5	0.500	1.00	ug/L	1	20.0	ND	97	79-123%	---	---	
1,2-Dichlorobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
1,3-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
1,4-Dichlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	ND	99	79-120%	---	---	
Dichlorodifluoromethane	22.7	0.500	1.00	ug/L	1	20.0	ND	114	32-152%	---	---	
1,1-Dichloroethane	18.7	0.200	0.400	ug/L	1	20.0	ND	93	77-125%	---	---	
1,2-Dichloroethane (EDC)	19.5	0.200	0.400	ug/L	1	20.0	ND	98	73-128%	---	---	
1,1-Dichloroethene	19.0	0.200	0.400	ug/L	1	20.0	ND	95	71-131%	---	---	
cis-1,2-Dichloroethene	18.7	0.200	0.400	ug/L	1	20.0	0.530	91	78-123%	---	---	
trans-1,2-Dichloroethene	18.4	0.200	0.400	ug/L	1	20.0	ND	92	75-124%	---	---	
1,2-Dichloropropane	17.5	0.250	0.500	ug/L	1	20.0	ND	87	78-122%	---	---	
1,3-Dichloropropane	19.6	0.500	1.00	ug/L	1	20.0	ND	98	80-120%	---	---	
2,2-Dichloropropane	20.0	0.500	1.00	ug/L	1	20.0	ND	100	60-139%	---	---	
1,1-Dichloropropene	19.5	0.500	1.00	ug/L	1	20.0	ND	98	79-125%	---	---	
cis-1,3-Dichloropropene	17.8	0.500	1.00	ug/L	1	20.0	ND	89	75-124%	---	---	
trans-1,3-Dichloropropene	21.2	0.500	1.00	ug/L	1	20.0	ND	106	73-127%	---	---	
Ethylbenzene	22.3	0.250	0.500	ug/L	1	20.0	ND	111	79-121%	---	---	
Hexachlorobutadiene	22.2	2.50	5.00	ug/L	1	20.0	ND	111	66-134%	---	---	
2-Hexanone	34.3	5.00	10.0	ug/L	1	40.0	ND	86	57-139%	---	---	
Isopropylbenzene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	72-131%	---	---	
4-Isopropyltoluene	20.7	0.500	1.00	ug/L	1	20.0	ND	104	77-127%	---	---	
Methylene chloride	19.2	1.50	3.00	ug/L	1	20.0	ND	96	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	35.5	5.00	10.0	ug/L	1	40.0	ND	89	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	18.9	0.500	1.00	ug/L	1	20.0	ND	94	71-124%	---	---	
Naphthalene	25.2	1.00	2.00	ug/L	1	20.0	ND	126	61-128%	---	---	Q-54
n-Propylbenzene	20.5	0.250	0.500	ug/L	1	20.0	ND	102	76-126%	---	---	
Styrene	20.7	0.500	1.00	ug/L	1	20.0	ND	104	78-123%	---	---	
1,1,1,2-Tetrachloroethane	21.9	0.200	0.400	ug/L	1	20.0	ND	110	78-124%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**AMENDED REPORT****GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Matrix Spike (9071122-MS1)			Prepared: 07/22/19 11:05		Analyzed: 07/22/19 16:31							
QC Source Sample: DP-3W (A9G0664-02)												
1,1,2,2-Tetrachloroethane	16.6	0.250	0.500	ug/L	1	20.0	ND	83	71-121%	---	---	Q-54a
Tetrachloroethene (PCE)	38.7	0.200	0.400	ug/L	1	20.0	16.6	110	74-129%	---	---	
Toluene	20.1	0.500	1.00	ug/L	1	20.0	ND	100	80-121%	---	---	
1,2,3-Trichlorobenzene	24.4	1.00	2.00	ug/L	1	20.0	ND	122	69-129%	---	---	
1,2,4-Trichlorobenzene	25.9	1.00	2.00	ug/L	1	20.0	ND	129	69-130%	---	---	
1,1,1-Trichloroethane	21.0	0.200	0.400	ug/L	1	20.0	ND	105	74-131%	---	---	
1,1,2-Trichloroethane	19.7	0.250	0.500	ug/L	1	20.0	ND	98	80-120%	---	---	
Trichloroethene (TCE)	21.1	0.200	0.400	ug/L	1	20.0	0.922	101	79-123%	---	---	
Trichlorofluoromethane	22.5	1.00	2.00	ug/L	1	20.0	ND	112	65-141%	---	---	
1,2,3-Trichloropropane	18.6	0.500	1.00	ug/L	1	20.0	ND	93	73-122%	---	---	
1,2,4-Trimethylbenzene	22.6	0.500	1.00	ug/L	1	20.0	ND	113	76-124%	---	---	Q-01
1,3,5-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	75-124%	---	---	
Vinyl chloride	19.1	0.200	0.400	ug/L	1	20.0	ND	96	58-137%	---	---	
m,p-Xylene	48.6	0.500	1.00	ug/L	1	40.0	ND	122	80-121%	---	---	
o-Xylene	22.6	0.250	0.500	ug/L	1	20.0	ND	113	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
Blank (9080549-BLK1)			Prepared: 08/01/19 14:00 Analyzed: 08/01/19 15:34									
EPA 8260C SIM												
Benzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						

LCS (9080549-BS1)

Prepared: 08/01/19 14:00 Analyzed: 08/01/19 15:07

EPA 8260C SIM

Benzene	0.205	0.0500	0.100	ug/L	1	0.200	---	102	80-120%	---	---
Toluene	0.185	0.0500	0.100	ug/L	1	0.200	---	93	80-120%	---	---

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
LCS (9080549-BS1)			Prepared: 08/01/19 14:00		Analyzed: 08/01/19 15:07							
Ethylbenzene	0.182	0.0500	0.100	ug/L	1	0.200	---	91	80-120%	---	---	
m,p-Xylene	0.369	0.100	0.200	ug/L	1	0.400	---	92	80-120%	---	---	
o-Xylene	0.172	0.0500	0.100	ug/L	1	0.200	---	86	80-120%	---	---	
1,2,4-Trimethylbenzene	0.179	0.0500	0.100	ug/L	1	0.200	---	90	80-120%	---	---	
1,3,5-Trimethylbenzene	0.181	0.0500	0.100	ug/L	1	0.200	---	90	80-120%	---	---	
Chloroform	0.201	0.0500	0.100	ug/L	1	0.200	---	101	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.200	0.100	0.200	ug/L	1	0.200	---	100	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.188	0.0100	0.0200	ug/L	1	0.200	---	94	80-120%	---	---	
1,1-Dichloroethane	0.202	0.0100	0.0200	ug/L	1	0.200	---	101	80-120%	---	---	
1,2-Dichloroethane (EDC)	0.200	0.0100	0.0200	ug/L	1	0.200	---	100	80-120%	---	---	
1,1-Dichloroethene	0.195	0.0100	0.0200	ug/L	1	0.200	---	97	80-120%	---	---	
cis-1,2-Dichloroethene	0.201	0.0100	0.0200	ug/L	1	0.200	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	0.198	0.0100	0.0200	ug/L	1	0.200	---	99	80-120%	---	---	
1,2-Dichloropropane	0.201	0.0100	0.0200	ug/L	1	0.200	---	101	80-120%	---	---	
cis-1,3-Dichloropropene	0.193	0.0100	0.0200	ug/L	1	0.200	---	97	80-120%	---	---	
trans-1,3-Dichloropropene	0.197	0.0100	0.0200	ug/L	1	0.200	---	99	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.191	0.0100	0.0200	ug/L	1	0.200	---	95	80-120%	---	---	
Naphthalene	0.181	0.0500	0.100	ug/L	1	0.200	---	91	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.206	0.0100	0.0200	ug/L	1	0.200	---	103	80-120%	---	---	
1,1,2-Trichloroethane	0.192	0.0100	0.0200	ug/L	1	0.200	---	96	80-120%	---	---	
Trichloroethene (TCE)	0.206	0.0100	0.0200	ug/L	1	0.200	---	103	80-120%	---	---	
1,2,3-Trichloropropane	0.202	0.0500	0.100	ug/L	1	0.200	---	101	80-120%	---	---	
Vinyl chloride	0.217	0.0100	0.0200	ug/L	1	0.200	---	109	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		96 %		70-130 %		"						

Duplicate (9080549-DUP1)

Prepared: 08/01/19 15:08 Analyzed: 08/01/19 16:27

QC Source Sample: DP-3W (A9G0664-02)

EPA 8260C SIM

Benzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
Toluene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
Ethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
m,p-Xylene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
Duplicate (9080549-DUP1)			Prepared: 08/01/19 15:08 Analyzed: 08/01/19 16:27									
QC Source Sample: DP-3W (A9G0664-02)												
o-Xylene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	0.605	0.0100	0.0200	ug/L	1	---	0.651	---	---	7	30%	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	0.903	0.0100	0.0200	ug/L	1	---	0.909	---	---	0.7	30%	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		99 %		70-130 %		"						

Matrix Spike (9080549-MS1)

Prepared: 08/01/19 15:08 Analyzed: 08/01/19 18:16

QC Source Sample: DP-1W (A9G0664-04)

EPA 8260C SIM

Benzene	0.222	0.0500	0.100	ug/L	1	0.200	ND	111	79-120%	---	---	
Toluene	0.194	0.0500	0.100	ug/L	1	0.200	ND	97	80-121%	---	---	
Ethylbenzene	0.189	0.0500	0.100	ug/L	1	0.200	ND	94	79-121%	---	---	
m,p-Xylene	0.394	0.100	0.200	ug/L	1	0.400	ND	99	80-121%	---	---	
o-Xylene	0.182	0.0500	0.100	ug/L	1	0.200	ND	91	78-122%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
Matrix Spike (9080549-MS1)			Prepared: 08/01/19 15:08 Analyzed: 08/01/19 18:16									
QC Source Sample: DP-1W (A9G0664-04)												
1,2,4-Trimethylbenzene	0.186	0.0500	0.100	ug/L	1	0.200	ND	93	76-124%	---	---	
1,3,5-Trimethylbenzene	0.182	0.0500	0.100	ug/L	1	0.200	ND	91	75-124%	---	---	
Chloroform	0.211	0.0500	0.100	ug/L	1	0.200	ND	105	79-124%	---	---	
1,2-Dibromo-3-chloropropane	0.191	0.100	0.200	ug/L	1	0.200	ND	96	62-128%	---	---	J
1,2-Dibromoethane (EDB)	0.192	0.0100	0.0200	ug/L	1	0.200	ND	96	77-121%	---	---	
1,1-Dichloroethane	0.218	0.0100	0.0200	ug/L	1	0.200	ND	109	77-125%	---	---	
1,2-Dichloroethane (EDC)	0.214	0.0100	0.0200	ug/L	1	0.200	ND	107	73-128%	---	---	
1,1-Dichloroethene	0.200	0.0100	0.0200	ug/L	1	0.200	ND	100	71-131%	---	---	
cis-1,2-Dichloroethene	0.212	0.0100	0.0200	ug/L	1	0.200	ND	106	78-123%	---	---	
trans-1,2-Dichloroethene	0.203	0.0100	0.0200	ug/L	1	0.200	ND	101	75-124%	---	---	
1,2-Dichloropropane	0.213	0.0100	0.0200	ug/L	1	0.200	ND	107	78-122%	---	---	
cis-1,3-Dichloropropene	0.201	0.0100	0.0200	ug/L	1	0.200	ND	100	75-124%	---	---	
trans-1,3-Dichloropropene	0.203	0.0100	0.0200	ug/L	1	0.200	ND	101	73-127%	---	---	
Methyl tert-butyl ether (MTBE)	0.203	0.0100	0.0200	ug/L	1	0.200	ND	102	71-124%	---	---	
Naphthalene	0.186	0.0500	0.100	ug/L	1	0.200	ND	93	61-128%	---	---	
1,1,2,2-Tetrachloroethane	0.198	0.0100	0.0200	ug/L	1	0.200	ND	99	71-121%	---	---	
1,1,2-Trichloroethane	0.198	0.0100	0.0200	ug/L	1	0.200	ND	99	80-120%	---	---	
Trichloroethene (TCE)	0.216	0.0100	0.0200	ug/L	1	0.200	ND	108	79-123%	---	---	
1,2,3-Trichloropropane	0.201	0.0500	0.100	ug/L	1	0.200	ND	101	73-122%	---	---	
Vinyl chloride	0.220	0.0100	0.0200	ug/L	1	0.200	ND	110	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

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 9071362 - EPA 3510C (Neutral pH)						Water						
Blank (9071362-BLK1)			Prepared: 07/29/19 13:08		Analyzed: 07/30/19 08:21		C-07					
EPA 8082A												
Aroclor 1016	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 82 %		Limits: 40-135 %		Dilution: 1x						
LCS (9071362-BS1)			Prepared: 07/29/19 13:08		Analyzed: 07/30/19 08:39		C-07					
EPA 8082A												
Aroclor 1016	1.61	0.0200	0.0400	ug/L	1	2.50	---	64	46-129%	---	---	
Aroclor 1260	1.93	0.0200	0.0400	ug/L	1	2.50	---	77	45-134%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 80 %		Limits: 40-135 %		Dilution: 1x						
LCS Dup (9071362-BSD1)			Prepared: 07/29/19 13:08		Analyzed: 07/30/19 08:56		C-07, Q-19					
EPA 8082A												
Aroclor 1016	1.63	0.0200	0.0400	ug/L	1	2.50	---	65	46-129%	1	30%	
Aroclor 1260	1.96	0.0200	0.0400	ug/L	1	2.50	---	78	45-134%	2	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 81 %		Limits: 40-135 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071208-BLK1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 13:31							
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071208-BLK1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 13:31							
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071208-BLK1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 13:31							
Benzoic acid	ND	1.14	2.27	ug/L	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.455	0.909	ug/L	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
Pyridine	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 71 %		Limits: 44-120 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		76 %		44-120 %		"						
Phenol-d6 (Surr)		22 %		10-120 %		"						
p-Terphenyl-d14 (Surr)		85 %		50-133 %		"						
2-Fluorophenol (Surr)		37 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		60 %		43-140 %		"						
												Q-41
LCS (9071208-BS1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 14:08							
EPA 8270D												
Acenaphthene	3.21	0.0200	0.0400	ug/L	2	4.00	---	80	47-122%	---	---	
Acenaphthylene	3.26	0.0200	0.0400	ug/L	2	4.00	---	81	41-130%	---	---	
Anthracene	3.41	0.0200	0.0400	ug/L	2	4.00	---	85	57-123%	---	---	
Benz(a)anthracene	3.64	0.0200	0.0400	ug/L	2	4.00	---	91	58-125%	---	---	
Benzo(a)pyrene	4.21	0.0300	0.0600	ug/L	2	4.00	---	105	54-128%	---	---	
Benzo(b)fluoranthene	4.19	0.0300	0.0600	ug/L	2	4.00	---	105	53-131%	---	---	
Benzo(k)fluoranthene	4.22	0.0300	0.0600	ug/L	2	4.00	---	105	57-129%	---	---	
Benzo(g,h,i)perylene	3.93	0.0200	0.0400	ug/L	2	4.00	---	98	50-134%	---	---	
Chrysene	3.74	0.0200	0.0400	ug/L	2	4.00	---	94	59-123%	---	---	
Dibenz(a,h)anthracene	4.00	0.0200	0.0400	ug/L	2	4.00	---	100	51-134%	---	---	
Fluoranthene	3.85	0.0200	0.0400	ug/L	2	4.00	---	96	57-128%	---	---	
Fluorene	3.50	0.0200	0.0400	ug/L	2	4.00	---	87	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.80	0.0200	0.0400	ug/L	2	4.00	---	95	52-133%	---	---	
1-Methylnaphthalene	3.04	0.0400	0.0800	ug/L	2	4.00	---	76	41-120%	---	---	
2-Methylnaphthalene	3.10	0.0400	0.0800	ug/L	2	4.00	---	78	40-121%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director



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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071208-BS1)						Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:08						
Naphthalene	2.86	0.0400	0.0800	ug/L	2	4.00	---	71	40-121%	---	---	
Phenanthrene	3.38	0.0200	0.0400	ug/L	2	4.00	---	85	59-120%	---	---	
Pyrene	3.90	0.0200	0.0400	ug/L	2	4.00	---	98	57-126%	---	---	
Carbazole	3.64	0.0300	0.0600	ug/L	2	4.00	---	91	60-122%	---	---	
Dibenzofuran	3.30	0.0200	0.0400	ug/L	2	4.00	---	83	53-120%	---	---	
4-Chloro-3-methylphenol	3.18	0.200	0.400	ug/L	2	4.00	---	80	52-120%	---	---	
2-Chlorophenol	2.90	0.100	0.200	ug/L	2	4.00	---	72	38-120%	---	---	
2,4-Dichlorophenol	3.40	0.100	0.200	ug/L	2	4.00	---	85	47-121%	---	---	
2,4-Dimethylphenol	2.33	0.100	0.200	ug/L	2	4.00	---	58	31-124%	---	---	
2,4-Dinitrophenol	4.94	0.500	1.00	ug/L	2	4.00	---	124	23-143%	---	---	
4,6-Dinitro-2-methylphenol	5.67	0.500	1.00	ug/L	2	4.00	---	142	44-137%	---	---	Q-29, Q-41
2-Methylphenol	2.45	0.0500	0.100	ug/L	2	4.00	---	61	30-120%	---	---	
3+4-Methylphenol(s)	2.24	0.0500	0.100	ug/L	2	4.00	---	56	29-120%	---	---	
2-Nitrophenol	3.51	0.200	0.400	ug/L	2	4.00	---	88	47-123%	---	---	Q-41
4-Nitrophenol	1.25	0.200	0.400	ug/L	2	4.00	---	31	5-120%	---	---	Q-31
Pentachlorophenol (PCP)	3.66	0.200	0.400	ug/L	2	4.00	---	91	35-138%	---	---	
Phenol	1.27	0.400	0.800	ug/L	2	4.00	---	32	5-120%	---	---	
2,3,4,6-Tetrachlorophenol	3.63	0.100	0.200	ug/L	2	4.00	---	91	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	3.83	0.100	0.200	ug/L	2	4.00	---	96	50-121%	---	---	
2,4,5-Trichlorophenol	3.49	0.100	0.200	ug/L	2	4.00	---	87	53-123%	---	---	
2,4,6-Trichlorophenol	3.44	0.100	0.200	ug/L	2	4.00	---	86	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	3.68	0.400	0.800	ug/L	2	4.00	---	92	55-135%	---	---	
Butyl benzyl phthalate	3.61	0.400	0.800	ug/L	2	4.00	---	90	53-134%	---	---	
Diethylphthalate	3.99	0.400	0.800	ug/L	2	4.00	---	100	55-125%	---	---	
Dimethylphthalate	3.75	0.400	0.800	ug/L	2	4.00	---	94	45-127%	---	---	
Di-n-butylphthalate	3.66	0.400	0.800	ug/L	2	4.00	---	91	59-127%	---	---	
Di-n-octyl phthalate	4.00	0.400	0.800	ug/L	2	4.00	---	100	51-140%	---	---	
N-Nitrosodimethylamine	1.62	0.0500	0.100	ug/L	2	4.00	---	40	6-120%	---	---	
N-Nitroso-di-n-propylamine	3.03	0.0500	0.100	ug/L	2	4.00	---	76	49-120%	---	---	
N-Nitrosodiphenylamine	3.32	0.0500	0.100	ug/L	2	4.00	---	83	51-123%	---	---	
Bis(2-Chloroethoxy) methane	2.96	0.0500	0.100	ug/L	2	4.00	---	74	48-120%	---	---	
Bis(2-Chloroethyl) ether	2.86	0.0500	0.100	ug/L	2	4.00	---	71	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	2.59	0.0500	0.100	ug/L	2	4.00	---	65	37-130%	---	---	
Hexachlorobenzene	3.40	0.0200	0.0400	ug/L	2	4.00	---	85	52-125%	---	---	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071208-BS1)						Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:08						
Hexachlorobutadiene	2.90	0.0500	0.100	ug/L	2	4.00	---	73	22-124%	---	---	
Hexachlorocyclopentadiene	2.90	0.100	0.200	ug/L	2	4.00	---	72	5-127%	---	---	
Hexachloroethane	2.49	0.0500	0.100	ug/L	2	4.00	---	62	21-120%	---	---	
2-Chloronaphthalene	2.94	0.0200	0.0400	ug/L	2	4.00	---	74	40-120%	---	---	
1,2-Dichlorobenzene	2.70	0.0500	0.100	ug/L	2	4.00	---	68	32-120%	---	---	
1,3-Dichlorobenzene	2.62	0.0500	0.100	ug/L	2	4.00	---	65	28-120%	---	---	
1,4-Dichlorobenzene	2.66	0.0500	0.100	ug/L	2	4.00	---	66	29-120%	---	---	
1,2,4-Trichlorobenzene	2.91	0.0500	0.100	ug/L	2	4.00	---	73	29-120%	---	---	
4-Bromophenyl phenyl ether	3.41	0.0500	0.100	ug/L	2	4.00	---	85	54-124%	---	---	
4-Chlorophenyl phenyl ether	3.59	0.0500	0.100	ug/L	2	4.00	---	90	53-121%	---	---	
Aniline	2.45	0.100	0.200	ug/L	2	4.00	---	61	6-120%	---	---	Q-31
4-Chloroaniline	2.80	0.0500	0.100	ug/L	2	4.00	---	70	33-120%	---	---	
2-Nitroaniline	3.62	0.400	0.800	ug/L	2	4.00	---	91	54-127%	---	---	
3-Nitroaniline	3.59	0.400	0.800	ug/L	2	4.00	---	90	41-128%	---	---	
4-Nitroaniline	4.22	0.400	0.800	ug/L	2	4.00	---	105	35-120%	---	---	
Nitrobenzene	2.99	0.200	0.400	ug/L	2	4.00	---	75	45-121%	---	---	
2,4-Dinitrotoluene	4.02	0.200	0.400	ug/L	2	4.00	---	101	57-128%	---	---	
2,6-Dinitrotoluene	3.83	0.200	0.400	ug/L	2	4.00	---	96	57-124%	---	---	
Benzoic acid	0.887	0.800	0.800	ug/L	2	8.00	---	11	5-120%	---	---	
Benzyl alcohol	2.53	0.200	0.400	ug/L	2	4.00	---	63	31-120%	---	---	
Isophorone	3.08	0.0500	0.100	ug/L	2	4.00	---	77	42-124%	---	---	
Azobenzene (1,2-DPH)	2.81	0.0500	0.100	ug/L	2	4.00	---	70	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	3.59	0.500	1.00	ug/L	2	4.00	---	90	40-125%	---	---	
3,3'-Dichlorobenzidine	7.82	1.00	2.00	ug/L	2	8.00	---	98	27-129%	---	---	
1,2-Dinitrobenzene	3.91	0.500	1.00	ug/L	2	4.00	---	98	59-120%	---	---	
1,3-Dinitrobenzene	4.01	0.500	1.00	ug/L	2	4.00	---	100	49-128%	---	---	
1,4-Dinitrobenzene	4.26	0.500	1.00	ug/L	2	4.00	---	106	40-120%	---	---	Q-41
Pyridine	1.45	0.200	0.400	ug/L	2	4.00	---	36	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 75 %	Limits: 44-120 %	Dilution: 2x							
2-Fluorobiphenyl (Surr)			74 %	44-120 %	"							
Phenol-d6 (Surr)			24 %	10-120 %	"							
p-Terphenyl-d14 (Surr)			86 %	50-133 %	"							
2-Fluorophenol (Surr)			38 %	19-120 %	"							
2,4,6-Tribromophenol (Surr)			89 %	43-140 %	"							

Q-41

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Philip Nerenberg

Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

AMENDED REPORT**GeoDesign, Inc.**

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (9071208-BSD1)				Prepared: 07/24/19 07:02				Analyzed: 07/24/19 14:44				Q-19
EPA 8270D												
Acenaphthene	3.43	0.0200	0.0400	ug/L	2	4.00	---	86	47-122%	7	30%	
Acenaphthylene	3.50	0.0200	0.0400	ug/L	2	4.00	---	87	41-130%	7	30%	
Anthracene	3.52	0.0200	0.0400	ug/L	2	4.00	---	88	57-123%	3	30%	
Benz(a)anthracene	3.71	0.0200	0.0400	ug/L	2	4.00	---	93	58-125%	2	30%	
Benzo(a)pyrene	4.33	0.0300	0.0600	ug/L	2	4.00	---	108	54-128%	3	30%	
Benzo(b)fluoranthene	4.24	0.0300	0.0600	ug/L	2	4.00	---	106	53-131%	1	30%	
Benzo(k)fluoranthene	4.29	0.0300	0.0600	ug/L	2	4.00	---	107	57-129%	2	30%	
Benzo(g,h,i)perylene	4.00	0.0200	0.0400	ug/L	2	4.00	---	100	50-134%	2	30%	
Chrysene	3.80	0.0200	0.0400	ug/L	2	4.00	---	95	59-123%	2	30%	
Dibenz(a,h)anthracene	4.14	0.0200	0.0400	ug/L	2	4.00	---	104	51-134%	4	30%	
Fluoranthene	3.82	0.0200	0.0400	ug/L	2	4.00	---	96	57-128%	0.6	30%	
Fluorene	3.66	0.0200	0.0400	ug/L	2	4.00	---	91	52-124%	5	30%	
Indeno(1,2,3-cd)pyrene	3.82	0.0200	0.0400	ug/L	2	4.00	---	96	52-133%	0.6	30%	
1-Methylnaphthalene	3.35	0.0400	0.0800	ug/L	2	4.00	---	84	41-120%	10	30%	
2-Methylnaphthalene	3.40	0.0400	0.0800	ug/L	2	4.00	---	85	40-121%	9	30%	
Naphthalene	3.08	0.0400	0.0800	ug/L	2	4.00	---	77	40-121%	8	30%	
Phenanthrene	3.57	0.0200	0.0400	ug/L	2	4.00	---	89	59-120%	5	30%	
Pyrene	3.88	0.0200	0.0400	ug/L	2	4.00	---	97	57-126%	0.5	30%	
Carbazole	3.60	0.0300	0.0600	ug/L	2	4.00	---	90	60-122%	1	30%	
Dibenzofuran	3.53	0.0200	0.0400	ug/L	2	4.00	---	88	53-120%	7	30%	
4-Chloro-3-methylphenol	3.61	0.200	0.400	ug/L	2	4.00	---	90	52-120%	13	30%	
2-Chlorophenol	3.09	0.100	0.200	ug/L	2	4.00	---	77	38-120%	6	30%	
2,4-Dichlorophenol	3.76	0.100	0.200	ug/L	2	4.00	---	94	47-121%	10	30%	
2,4-Dimethylphenol	2.64	0.100	0.200	ug/L	2	4.00	---	66	31-124%	13	30%	
2,4-Dinitrophenol	4.83	0.500	1.00	ug/L	2	4.00	---	121	23-143%	2	30%	
4,6-Dinitro-2-methylphenol	5.39	0.500	1.00	ug/L	2	4.00	---	135	44-137%	5	30%	Q-41
2-Methylphenol	2.63	0.0500	0.100	ug/L	2	4.00	---	66	30-120%	7	30%	
3+4-Methylphenol(s)	2.39	0.0500	0.100	ug/L	2	4.00	---	60	29-120%	6	30%	
2-Nitrophenol	3.87	0.200	0.400	ug/L	2	4.00	---	97	47-123%	10	30%	Q-41
4-Nitrophenol	1.19	0.200	0.400	ug/L	2	4.00	---	30	5-120%	5	30%	Q-31
Pentachlorophenol (PCP)	3.78	0.200	0.400	ug/L	2	4.00	---	94	35-138%	3	30%	
Phenol	1.36	0.400	0.800	ug/L	2	4.00	---	34	5-120%	7	30%	
2,3,4,6-Tetrachlorophenol	3.80	0.100	0.200	ug/L	2	4.00	---	95	50-128%	5	30%	

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (9071208-BSD1)						Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:44						Q-19
2,3,5,6-Tetrachlorophenol	4.05	0.100	0.200	ug/L	2	4.00	---	101	50-121%	6	30%	
2,4,5-Trichlorophenol	3.75	0.100	0.200	ug/L	2	4.00	---	94	53-123%	7	30%	
2,4,6-Trichlorophenol	3.98	0.100	0.200	ug/L	2	4.00	---	99	50-125%	15	30%	
Bis(2-ethylhexyl)phthalate	3.66	0.400	0.800	ug/L	2	4.00	---	92	55-135%	0.3	30%	
Butyl benzyl phthalate	3.59	0.400	0.800	ug/L	2	4.00	---	90	53-134%	0.4	30%	
Diethylphthalate	3.96	0.400	0.800	ug/L	2	4.00	---	99	55-125%	0.6	30%	
Dimethylphthalate	3.90	0.400	0.800	ug/L	2	4.00	---	97	45-127%	4	30%	
Di-n-butylphthalate	3.56	0.400	0.800	ug/L	2	4.00	---	89	59-127%	3	30%	
Di-n-octyl phthalate	4.01	0.400	0.800	ug/L	2	4.00	---	100	51-140%	0.2	30%	
N-Nitrosodimethylamine	1.75	0.0500	0.100	ug/L	2	4.00	---	44	6-120%	8	30%	
N-Nitroso-di-n-propylamine	3.18	0.0500	0.100	ug/L	2	4.00	---	80	49-120%	5	30%	
N-Nitrosodiphenylamine	3.65	0.0500	0.100	ug/L	2	4.00	---	91	51-123%	9	30%	
Bis(2-Chloroethoxy) methane	3.19	0.0500	0.100	ug/L	2	4.00	---	80	48-120%	7	30%	
Bis(2-Chloroethyl) ether	3.01	0.0500	0.100	ug/L	2	4.00	---	75	43-120%	5	30%	
2,2'-Oxybis(1-Chloropropane)	2.70	0.0500	0.100	ug/L	2	4.00	---	68	37-130%	5	30%	
Hexachlorobenzene	3.79	0.0200	0.0400	ug/L	2	4.00	---	95	52-125%	11	30%	
Hexachlorobutadiene	3.12	0.0500	0.100	ug/L	2	4.00	---	78	22-124%	7	30%	
Hexachlorocyclopentadiene	3.28	0.100	0.200	ug/L	2	4.00	---	82	5-127%	12	30%	
Hexachloroethane	2.72	0.0500	0.100	ug/L	2	4.00	---	68	21-120%	9	30%	
2-Chloronaphthalene	3.19	0.0200	0.0400	ug/L	2	4.00	---	80	40-120%	8	30%	
1,2-Dichlorobenzene	2.87	0.0500	0.100	ug/L	2	4.00	---	72	32-120%	6	30%	
1,3-Dichlorobenzene	2.78	0.0500	0.100	ug/L	2	4.00	---	69	28-120%	6	30%	
1,4-Dichlorobenzene	2.82	0.0500	0.100	ug/L	2	4.00	---	71	29-120%	6	30%	
1,2,4-Trichlorobenzene	3.18	0.0500	0.100	ug/L	2	4.00	---	79	29-120%	9	30%	
4-Bromophenyl phenyl ether	3.72	0.0500	0.100	ug/L	2	4.00	---	93	54-124%	9	30%	
4-Chlorophenyl phenyl ether	3.71	0.0500	0.100	ug/L	2	4.00	---	93	53-121%	3	30%	
Aniline	2.59	0.100	0.200	ug/L	2	4.00	---	65	6-120%	6	30%	Q-31
4-Chloroaniline	3.05	0.0500	0.100	ug/L	2	4.00	---	76	33-120%	9	30%	
2-Nitroaniline	3.92	0.400	0.800	ug/L	2	4.00	---	98	54-127%	8	30%	
3-Nitroaniline	3.61	0.400	0.800	ug/L	2	4.00	---	90	41-128%	0.5	30%	
4-Nitroaniline	3.87	0.400	0.800	ug/L	2	4.00	---	97	35-120%	9	30%	
Nitrobenzene	3.15	0.200	0.400	ug/L	2	4.00	---	79	45-121%	5	30%	
2,4-Dinitrotoluene	4.03	0.200	0.400	ug/L	2	4.00	---	101	57-128%	0.3	30%	
2,6-Dinitrotoluene	4.03	0.200	0.400	ug/L	2	4.00	---	101	57-124%	5	30%	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (9071208-BSD1)					Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:44						Q-19	
Benzoic acid	1.41	1.40	1.40	ug/L	2	8.00	---	18	5-120%	45	30%	Q-24
Benzyl alcohol	2.72	0.200	0.400	ug/L	2	4.00	---	68	31-120%	7	30%	
Isophorone	3.36	0.0500	0.100	ug/L	2	4.00	---	84	42-124%	9	30%	
Azobenzene (1,2-DPH)	3.11	0.0500	0.100	ug/L	2	4.00	---	78	61-120%	10	30%	
Bis(2-Ethylhexyl) adipate	3.38	0.500	1.00	ug/L	2	4.00	---	84	40-125%	6	30%	
3,3'-Dichlorobenzidine	8.24	1.00	2.00	ug/L	2	8.00	---	103	27-129%	5	30%	
1,2-Dinitrobenzene	4.01	0.500	1.00	ug/L	2	4.00	---	100	59-120%	3	30%	
1,3-Dinitrobenzene	4.09	0.500	1.00	ug/L	2	4.00	---	102	49-128%	2	30%	
1,4-Dinitrobenzene	4.55	0.500	1.00	ug/L	2	4.00	---	114	40-120%	7	30%	Q-41
Pyridine	1.55	0.200	0.400	ug/L	2	4.00	---	39	5-120%	6	30%	
Surr: Nitrobenzene-d5 (Surr) Recovery: 83 % Limits: 44-120 % Dilution: 2x												
2-Fluorobiphenyl (Surr) 81 % 44-120 % "												
Phenol-d6 (Surr) 27 % 10-120 % "												
p-Terphenyl-d14 (Surr) 89 % 50-133 % "												
2-Fluorophenol (Surr) 43 % 19-120 % "												
2,4,6-Tribromophenol (Surr) 103 % 43-140 % " Q-41												

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071294-BLK2)			Prepared: 07/25/19 13:03		Analyzed: 07/26/19 10:59							
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071294-BLK2)			Prepared: 07/25/19 13:03		Analyzed: 07/26/19 10:59							
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071294-BLK2)			Prepared: 07/25/19 13:03		Analyzed: 07/26/19 10:59							
Benzoic acid	ND	1.14	2.27	ug/L	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.455	0.909	ug/L	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
Pyridine	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			Recovery: 71 %		Limits: 44-120 %		Dilution: 1x					
2-Fluorobiphenyl (Surr)			66 %		44-120 %		"					
Phenol-d6 (Surr)			26 %		10-120 %		"					
p-Terphenyl-d14 (Surr)			88 %		50-133 %		"					
2-Fluorophenol (Surr)			39 %		19-120 %		"					
2,4,6-Tribromophenol (Surr)			83 %		43-140 %		"					
LCS (9071294-BS1)						Prepared: 07/25/19 13:03		Analyzed: 07/25/19 19:07				
EPA 8270D												
Acenaphthene	3.27	0.0400	0.0800	ug/L	4	4.00	---	82	47-122%	---	---	
Acenaphthylene	3.42	0.0400	0.0800	ug/L	4	4.00	---	86	41-130%	---	---	
Anthracene	3.56	0.0400	0.0800	ug/L	4	4.00	---	89	57-123%	---	---	
Benz(a)anthracene	3.73	0.0400	0.0800	ug/L	4	4.00	---	93	58-125%	---	---	
Benzo(a)pyrene	3.70	0.0600	0.120	ug/L	4	4.00	---	92	54-128%	---	---	
Benzo(b)fluoranthene	3.83	0.0600	0.120	ug/L	4	4.00	---	96	53-131%	---	---	
Benzo(k)fluoranthene	3.93	0.0600	0.120	ug/L	4	4.00	---	98	57-129%	---	---	
Benzo(g,h,i)perylene	3.93	0.0400	0.0800	ug/L	4	4.00	---	98	50-134%	---	---	
Chrysene	3.80	0.0400	0.0800	ug/L	4	4.00	---	95	59-123%	---	---	
Dibenz(a,h)anthracene	3.74	0.0400	0.0800	ug/L	4	4.00	---	94	51-134%	---	---	
Fluoranthene	3.86	0.0400	0.0800	ug/L	4	4.00	---	97	57-128%	---	---	
Fluorene	3.51	0.0400	0.0800	ug/L	4	4.00	---	88	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.56	0.0400	0.0800	ug/L	4	4.00	---	89	52-133%	---	---	
1-Methylnaphthalene	3.00	0.0800	0.160	ug/L	4	4.00	---	75	41-120%	---	---	
2-Methylnaphthalene	3.06	0.0800	0.160	ug/L	4	4.00	---	76	40-121%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071294-BS1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:07						
Naphthalene	2.94	0.0800	0.160	ug/L	4	4.00	---	74	40-121%	---	---	
Phenanthrene	3.49	0.0400	0.0800	ug/L	4	4.00	---	87	59-120%	---	---	
Pyrene	3.91	0.0400	0.0800	ug/L	4	4.00	---	98	57-126%	---	---	
Carbazole	4.05	0.0600	0.120	ug/L	4	4.00	---	101	60-122%	---	---	
Dibenzofuran	3.43	0.0400	0.0800	ug/L	4	4.00	---	86	53-120%	---	---	
4-Chloro-3-methylphenol	3.22	0.400	0.800	ug/L	4	4.00	---	80	52-120%	---	---	
2-Chlorophenol	2.74	0.200	0.400	ug/L	4	4.00	---	68	38-120%	---	---	
2,4-Dichlorophenol	3.49	0.200	0.400	ug/L	4	4.00	---	87	47-121%	---	---	
2,4-Dimethylphenol	2.20	0.200	0.400	ug/L	4	4.00	---	55	31-124%	---	---	
2,4-Dinitrophenol	3.33	1.00	2.00	ug/L	4	4.00	---	83	23-143%	---	---	
4,6-Dinitro-2-methylphenol	3.98	1.00	2.00	ug/L	4	4.00	---	99	44-137%	---	---	
2-Methylphenol	2.39	0.100	0.200	ug/L	4	4.00	---	60	30-120%	---	---	
3+4-Methylphenol(s)	2.38	0.100	0.200	ug/L	4	4.00	---	59	29-120%	---	---	
2-Nitrophenol	3.45	0.400	0.800	ug/L	4	4.00	---	86	47-123%	---	---	
4-Nitrophenol	1.51	0.400	0.800	ug/L	4	4.00	---	38	5-120%	---	---	
Pentachlorophenol (PCP)	3.76	0.400	0.800	ug/L	4	4.00	---	94	35-138%	---	---	
Phenol	1.07	0.800	0.800	ug/L	4	4.00	---	27	5-120%	---	---	
2,3,4,6-Tetrachlorophenol	3.47	0.200	0.400	ug/L	4	4.00	---	87	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	3.41	0.200	0.400	ug/L	4	4.00	---	85	50-121%	---	---	
2,4,5-Trichlorophenol	3.63	0.200	0.400	ug/L	4	4.00	---	91	53-123%	---	---	
2,4,6-Trichlorophenol	3.42	0.200	0.400	ug/L	4	4.00	---	86	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	3.87	0.800	1.60	ug/L	4	4.00	---	97	55-135%	---	---	
Butyl benzyl phthalate	3.69	0.800	1.60	ug/L	4	4.00	---	92	53-134%	---	---	
Diethylphthalate	3.81	0.800	1.60	ug/L	4	4.00	---	95	55-125%	---	---	
Dimethylphthalate	3.60	0.800	1.60	ug/L	4	4.00	---	90	45-127%	---	---	
Di-n-butylphthalate	3.94	0.800	1.60	ug/L	4	4.00	---	99	59-127%	---	---	
Di-n-octyl phthalate	3.74	0.800	1.60	ug/L	4	4.00	---	94	51-140%	---	---	
N-Nitrosodimethylamine	1.82	0.100	0.200	ug/L	4	4.00	---	46	6-120%	---	---	
N-Nitroso-di-n-propylamine	2.99	0.100	0.200	ug/L	4	4.00	---	75	49-120%	---	---	
N-Nitrosodiphenylamine	3.64	0.100	0.200	ug/L	4	4.00	---	91	51-123%	---	---	
Bis(2-Chloroethoxy) methane	3.41	0.100	0.200	ug/L	4	4.00	---	85	48-120%	---	---	
Bis(2-Chloroethyl) ether	2.49	0.100	0.200	ug/L	4	4.00	---	62	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	2.58	0.100	0.200	ug/L	4	4.00	---	65	37-130%	---	---	
Hexachlorobenzene	3.41	0.0400	0.0800	ug/L	4	4.00	---	85	52-125%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071294-BS1)			Prepared: 07/25/19 13:03		Analyzed: 07/25/19 19:07							
Hexachlorobutadiene	2.75	0.100	0.200	ug/L	4	4.00	---	69	22-124%	---	---	Q-31
Hexachlorocyclopentadiene	3.05	0.200	0.400	ug/L	4	4.00	---	76	5-127%	---	---	
Hexachloroethane	2.83	0.100	0.200	ug/L	4	4.00	---	71	21-120%	---	---	
2-Chloronaphthalene	3.25	0.0400	0.0800	ug/L	4	4.00	---	81	40-120%	---	---	
1,2-Dichlorobenzene	2.55	0.100	0.200	ug/L	4	4.00	---	64	32-120%	---	---	
1,3-Dichlorobenzene	2.50	0.100	0.200	ug/L	4	4.00	---	62	28-120%	---	---	
1,4-Dichlorobenzene	2.56	0.100	0.200	ug/L	4	4.00	---	64	29-120%	---	---	
1,2,4-Trichlorobenzene	2.90	0.100	0.200	ug/L	4	4.00	---	73	29-120%	---	---	
4-Bromophenyl phenyl ether	3.53	0.100	0.200	ug/L	4	4.00	---	88	54-124%	---	---	
4-Chlorophenyl phenyl ether	3.48	0.100	0.200	ug/L	4	4.00	---	87	53-121%	---	---	
Aniline	2.51	0.200	0.400	ug/L	4	4.00	---	63	6-120%	---	---	
4-Chloroaniline	2.46	0.100	0.200	ug/L	4	4.00	---	61	33-120%	---	---	
2-Nitroaniline	3.61	0.800	1.60	ug/L	4	4.00	---	90	54-127%	---	---	
3-Nitroaniline	3.10	0.800	1.60	ug/L	4	4.00	---	77	41-128%	---	---	
4-Nitroaniline	3.94	0.800	1.60	ug/L	4	4.00	---	99	35-120%	---	---	
Nitrobenzene	2.81	0.400	0.800	ug/L	4	4.00	---	70	45-121%	---	---	
2,4-Dinitrotoluene	3.71	0.400	0.800	ug/L	4	4.00	---	93	57-128%	---	---	
2,6-Dinitrotoluene	3.74	0.400	0.800	ug/L	4	4.00	---	94	57-124%	---	---	
Benzoic acid	1.39	1.20	1.20	ug/L	4	8.00	---	17	5-120%	---	---	
Benzyl alcohol	2.64	0.400	0.800	ug/L	4	4.00	---	66	31-120%	---	---	
Isophorone	3.28	0.100	0.200	ug/L	4	4.00	---	82	42-124%	---	---	
Azobenzene (1,2-DPH)	3.52	0.100	0.200	ug/L	4	4.00	---	88	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	3.70	1.00	2.00	ug/L	4	4.00	---	93	40-125%	---	---	
3,3'-Dichlorobenzidine	10.3	2.00	4.00	ug/L	4	8.00	---	129	27-129%	---	---	
1,2-Dinitrobenzene	3.51	1.00	2.00	ug/L	4	4.00	---	88	59-120%	---	---	
1,3-Dinitrobenzene	3.62	1.00	2.00	ug/L	4	4.00	---	91	49-128%	---	---	
1,4-Dinitrobenzene	3.52	1.00	2.00	ug/L	4	4.00	---	88	40-120%	---	---	
Pyridine	1.50	0.400	0.800	ug/L	4	4.00	---	38	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 68 %		Limits: 44-120 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		80 %		44-120 %		"						
Phenol-d6 (Surr)		27 %		10-120 %		"						
p-Terphenyl-d14 (Surr)		94 %		50-133 %		"						
2-Fluorophenol (Surr)		39 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		96 %		43-140 %		"						

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Philip Nerenberg

Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (9071294-BSD1)				Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:44					Q-19			
EPA 8270D												
Acenaphthene	3.49	0.0400	0.0800	ug/L	4	4.00	---	87	47-122%	7	30%	
Acenaphthylene	3.59	0.0400	0.0800	ug/L	4	4.00	---	90	41-130%	5	30%	
Anthracene	3.74	0.0400	0.0800	ug/L	4	4.00	---	94	57-123%	5	30%	
Benz(a)anthracene	3.85	0.0400	0.0800	ug/L	4	4.00	---	96	58-125%	3	30%	
Benzo(a)pyrene	3.96	0.0600	0.120	ug/L	4	4.00	---	99	54-128%	7	30%	
Benzo(b)fluoranthene	4.03	0.0600	0.120	ug/L	4	4.00	---	101	53-131%	5	30%	
Benzo(k)fluoranthene	4.13	0.0600	0.120	ug/L	4	4.00	---	103	57-129%	5	30%	
Benzo(g,h,i)perylene	4.08	0.0400	0.0800	ug/L	4	4.00	---	102	50-134%	4	30%	
Chrysene	3.91	0.0400	0.0800	ug/L	4	4.00	---	98	59-123%	3	30%	
Dibenz(a,h)anthracene	3.89	0.0400	0.0800	ug/L	4	4.00	---	97	51-134%	4	30%	
Fluoranthene	3.96	0.0400	0.0800	ug/L	4	4.00	---	99	57-128%	3	30%	
Fluorene	3.66	0.0400	0.0800	ug/L	4	4.00	---	91	52-124%	4	30%	
Indeno(1,2,3-cd)pyrene	3.67	0.0400	0.0800	ug/L	4	4.00	---	92	52-133%	3	30%	
1-Methylnaphthalene	3.18	0.0800	0.160	ug/L	4	4.00	---	80	41-120%	6	30%	
2-Methylnaphthalene	3.31	0.0800	0.160	ug/L	4	4.00	---	83	40-121%	8	30%	
Naphthalene	3.22	0.0800	0.160	ug/L	4	4.00	---	80	40-121%	9	30%	
Phenanthrene	3.70	0.0400	0.0800	ug/L	4	4.00	---	92	59-120%	6	30%	
Pyrene	4.04	0.0400	0.0800	ug/L	4	4.00	---	101	57-126%	3	30%	
Carbazole	4.14	0.0600	0.120	ug/L	4	4.00	---	104	60-122%	2	30%	
Dibenzofuran	3.57	0.0400	0.0800	ug/L	4	4.00	---	89	53-120%	4	30%	
4-Chloro-3-methylphenol	3.42	0.400	0.800	ug/L	4	4.00	---	86	52-120%	6	30%	
2-Chlorophenol	2.94	0.200	0.400	ug/L	4	4.00	---	73	38-120%	7	30%	
2,4-Dichlorophenol	3.77	0.200	0.400	ug/L	4	4.00	---	94	47-121%	8	30%	
2,4-Dimethylphenol	2.53	0.200	0.400	ug/L	4	4.00	---	63	31-124%	14	30%	
2,4-Dinitrophenol	3.27	1.00	2.00	ug/L	4	4.00	---	82	23-143%	2	30%	
4,6-Dinitro-2-methylphenol	3.90	1.00	2.00	ug/L	4	4.00	---	97	44-137%	2	30%	
2-Methylphenol	2.63	0.100	0.200	ug/L	4	4.00	---	66	30-120%	9	30%	
3+4-Methylphenol(s)	2.64	0.100	0.200	ug/L	4	4.00	---	66	29-120%	10	30%	
2-Nitrophenol	3.63	0.400	0.800	ug/L	4	4.00	---	91	47-123%	5	30%	
4-Nitrophenol	1.60	0.400	0.800	ug/L	4	4.00	---	40	5-120%	6	30%	
Pentachlorophenol (PCP)	3.82	0.400	0.800	ug/L	4	4.00	---	95	35-138%	1	30%	
Phenol	1.44	0.800	0.800	ug/L	4	4.00	---	36	5-120%	30	30%	
2,3,4,6-Tetrachlorophenol	3.74	0.200	0.400	ug/L	4	4.00	---	93	50-128%	7	30%	

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (9071294-BSD1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:44					Q-19	
2,3,5,6-Tetrachlorophenol	3.63	0.200	0.400	ug/L	4	4.00	---	91	50-121%	6	30%	
2,4,5-Trichlorophenol	3.93	0.200	0.400	ug/L	4	4.00	---	98	53-123%	8	30%	
2,4,6-Trichlorophenol	3.67	0.200	0.400	ug/L	4	4.00	---	92	50-125%	7	30%	
Bis(2-ethylhexyl)phthalate	3.95	0.800	1.60	ug/L	4	4.00	---	99	55-135%	2	30%	
Butyl benzyl phthalate	3.82	0.800	1.60	ug/L	4	4.00	---	96	53-134%	3	30%	
Diethylphthalate	3.95	0.800	1.60	ug/L	4	4.00	---	99	55-125%	4	30%	
Dimethylphthalate	3.73	0.800	1.60	ug/L	4	4.00	---	93	45-127%	4	30%	
Di-n-butylphthalate	4.10	0.800	1.60	ug/L	4	4.00	---	102	59-127%	4	30%	
Di-n-octyl phthalate	3.97	0.800	1.60	ug/L	4	4.00	---	99	51-140%	6	30%	
N-Nitrosodimethylamine	2.08	0.100	0.200	ug/L	4	4.00	---	52	6-120%	13	30%	
N-Nitroso-di-n-propylamine	3.10	0.100	0.200	ug/L	4	4.00	---	78	49-120%	4	30%	
N-Nitrosodiphenylamine	3.77	0.100	0.200	ug/L	4	4.00	---	94	51-123%	4	30%	
Bis(2-Chloroethoxy) methane	3.74	0.100	0.200	ug/L	4	4.00	---	93	48-120%	9	30%	
Bis(2-Chloroethyl) ether	2.74	0.100	0.200	ug/L	4	4.00	---	69	43-120%	9	30%	
2,2'-Oxybis(1-Chloropropane)	2.75	0.100	0.200	ug/L	4	4.00	---	69	37-130%	6	30%	
Hexachlorobenzene	3.62	0.0400	0.0800	ug/L	4	4.00	---	90	52-125%	6	30%	
Hexachlorobutadiene	3.01	0.100	0.200	ug/L	4	4.00	---	75	22-124%	9	30%	
Hexachlorocyclopentadiene	3.23	0.200	0.400	ug/L	4	4.00	---	81	5-127%	6	30%	
Hexachloroethane	3.14	0.100	0.200	ug/L	4	4.00	---	78	21-120%	10	30%	
2-Chloronaphthalene	3.42	0.0400	0.0800	ug/L	4	4.00	---	86	40-120%	5	30%	
1,2-Dichlorobenzene	2.75	0.100	0.200	ug/L	4	4.00	---	69	32-120%	7	30%	
1,3-Dichlorobenzene	2.71	0.100	0.200	ug/L	4	4.00	---	68	28-120%	8	30%	
1,4-Dichlorobenzene	2.79	0.100	0.200	ug/L	4	4.00	---	70	29-120%	8	30%	
1,2,4-Trichlorobenzene	3.13	0.100	0.200	ug/L	4	4.00	---	78	29-120%	8	30%	
4-Bromophenyl phenyl ether	3.74	0.100	0.200	ug/L	4	4.00	---	93	54-124%	6	30%	
4-Chlorophenyl phenyl ether	3.58	0.100	0.200	ug/L	4	4.00	---	89	53-121%	3	30%	
Aniline	2.74	0.200	0.400	ug/L	4	4.00	---	69	6-120%	9	30%	
4-Chloroaniline	2.68	0.100	0.200	ug/L	4	4.00	---	67	33-120%	9	30%	
2-Nitroaniline	3.75	0.800	1.60	ug/L	4	4.00	---	94	54-127%	4	30%	
3-Nitroaniline	3.14	0.800	1.60	ug/L	4	4.00	---	78	41-128%	1	30%	
4-Nitroaniline	3.89	0.800	1.60	ug/L	4	4.00	---	97	35-120%	1	30%	
Nitrobenzene	2.92	0.400	0.800	ug/L	4	4.00	---	73	45-121%	4	30%	
2,4-Dinitrotoluene	3.92	0.400	0.800	ug/L	4	4.00	---	98	57-128%	5	30%	
2,6-Dinitrotoluene	3.89	0.400	0.800	ug/L	4	4.00	---	97	57-124%	4	30%	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (9071294-BSD1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:44						Q-19
Benzoic acid	1.57	1.20	1.20	ug/L	4	8.00	---	20	5-120%	12	30%	Q-31
Benzyl alcohol	2.88	0.400	0.800	ug/L	4	4.00	---	72	31-120%	9	30%	
Isophorone	3.48	0.100	0.200	ug/L	4	4.00	---	87	42-124%	6	30%	
Azobenzene (1,2-DPH)	3.66	0.100	0.200	ug/L	4	4.00	---	92	61-120%	4	30%	
Bis(2-Ethylhexyl) adipate	3.74	1.00	2.00	ug/L	4	4.00	---	94	40-125%	1	30%	
3,3'-Dichlorobenzidine	11.0	2.00	4.00	ug/L	4	8.00	---	138	27-129%	7	30%	Q-29
1,2-Dinitrobenzene	3.71	1.00	2.00	ug/L	4	4.00	---	93	59-120%	6	30%	
1,3-Dinitrobenzene	3.69	1.00	2.00	ug/L	4	4.00	---	92	49-128%	2	30%	
1,4-Dinitrobenzene	3.74	1.00	2.00	ug/L	4	4.00	---	94	40-120%	6	30%	
Pyridine	1.76	0.400	0.800	ug/L	4	4.00	---	44	5-120%	16	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>												
			Recovery: 71 %	Limits: 44-120 %	Dilution: 4x							
<i>2-Fluorobiphenyl (Surr)</i>			84 %	44-120 %	"							
<i>Phenol-d6 (Surr)</i>			31 %	10-120 %	"							
<i>p-Terphenyl-d14 (Surr)</i>			97 %	50-133 %	"							
<i>2-Fluorophenol (Surr)</i>			45 %	19-120 %	"							
<i>2,4,6-Tribromophenol (Surr)</i>			97 %	43-140 %	"							

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071319 - EPA 3015A						Water						
Blank (9071319-BLK1)			Prepared: 07/26/19 10:44		Analyzed: 07/31/19 17:16							
EPA 6020A												
Antimony	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Beryllium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.0400	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Nickel	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Thallium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	

LCS (9071319-BS1)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 17:20

<u>EPA 6020A</u>												
Antimony	27.1	0.500	1.00	ug/L	1	27.8	---	98	80-120%	---	---	
Arsenic	53.5	0.500	1.00	ug/L	1	55.6	---	96	80-120%	---	---	
Beryllium	26.5	0.100	0.200	ug/L	1	27.8	---	95	80-120%	---	---	
Cadmium	51.6	0.0400	0.200	ug/L	1	55.6	---	93	80-120%	---	---	
Chromium	55.4	0.500	1.00	ug/L	1	55.6	---	100	80-120%	---	---	
Copper	57.8	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Lead	50.9	0.100	0.200	ug/L	1	55.6	---	92	80-120%	---	---	
Mercury	1.03	0.0400	0.0800	ug/L	1	1.11	---	92	80-120%	---	---	
Nickel	57.1	0.500	1.00	ug/L	1	55.6	---	103	80-120%	---	---	
Selenium	27.0	0.500	1.00	ug/L	1	27.8	---	97	80-120%	---	---	
Silver	28.6	0.100	0.200	ug/L	1	27.8	---	103	80-120%	---	---	
Thallium	27.0	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Zinc	56.7	2.00	4.00	ug/L	1	55.6	---	102	80-120%	---	---	

Duplicate (9071319-DUP1)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 17:43

QC Source Sample: DP-2W (A9G0664-03)

EPA 6020A

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071319 - EPA 3015A						Water						
Duplicate (9071319-DUP1)			Prepared: 07/26/19 10:44 Analyzed: 07/31/19 17:43									
QC Source Sample: DP-2W (A9G0664-03)												
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	1.03	0.500	1.00	ug/L	1	---	1.19	---	---	14	20%	
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Cadmium	ND	0.0400	0.200	ug/L	1	---	ND	---	---	---	20%	
Chromium	0.783	0.500	1.00	ug/L	1	---	0.791	---	---	1	20%	
Copper	1.11	0.500	1.00	ug/L	1	---	1.20	---	---	7	20%	
Lead	0.220	0.100	0.200	ug/L	1	---	0.237	---	---	8	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	2.56	0.500	1.00	ug/L	1	---	2.56	---	---	0.2	20%	
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Zinc	4.03	2.00	4.00	ug/L	1	---	4.03	---	---	0.04	20%	

Matrix Spike (9071319-MS1)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 18:01

QC Source Sample: DP-2W (A9G0664-03)

EPA 6020A

Antimony	27.5	0.500	1.00	ug/L	1	27.8	ND	99	75-125%	---	---	
Arsenic	54.1	0.500	1.00	ug/L	1	55.6	1.19	95	75-125%	---	---	
Beryllium	28.8	0.100	0.200	ug/L	1	27.8	ND	104	75-125%	---	---	
Cadmium	59.1	0.0400	0.200	ug/L	1	55.6	ND	106	75-125%	---	---	
Chromium	55.6	0.500	1.00	ug/L	1	55.6	0.791	99	75-125%	---	---	
Copper	56.5	0.500	1.00	ug/L	1	55.6	1.20	99	75-125%	---	---	
Lead	54.9	0.100	0.200	ug/L	1	55.6	0.237	98	75-125%	---	---	
Mercury	1.13	0.0400	0.0800	ug/L	1	1.11	ND	101	75-125%	---	---	
Nickel	57.2	0.500	1.00	ug/L	1	55.6	2.56	98	75-125%	---	---	
Selenium	27.2	0.500	1.00	ug/L	1	27.8	ND	98	75-125%	---	---	
Silver	28.6	0.100	0.200	ug/L	1	27.8	ND	103	75-125%	---	---	
Thallium	26.7	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	---	---	
Zinc	58.3	2.00	4.00	ug/L	1	55.6	4.03	98	75-125%	---	---	

Matrix Spike (9071319-MS2)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 19:22

Apex Laboratories

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071319 - EPA 3015A						Water						
Matrix Spike (9071319-MS2)			Prepared: 07/26/19 10:44		Analyzed: 07/31/19 19:22							
QC Source Sample: Non-SDG (A9G0752-01)												
EPA 6020A												
Antimony	40.3	5.00	10.0	ug/L	10	27.8	9.32	111	75-125%	---	---	Q-03
Arsenic	56.7	5.00	10.0	ug/L	10	55.6	ND	102	75-125%	---	---	
Beryllium	26.7	1.00	2.00	ug/L	10	27.8	ND	96	75-125%	---	---	
Cadmium	62.0	0.400	2.00	ug/L	10	55.6	ND	112	75-125%	---	---	
Chromium	77.2	5.00	10.0	ug/L	10	55.6	18.5	106	75-125%	---	---	
Copper	349	5.00	10.0	ug/L	10	55.6	269	144	75-125%	---	---	Q-03
Lead	52.6	1.00	2.00	ug/L	10	55.6	ND	95	75-125%	---	---	
Mercury	0.977	0.400	0.800	ug/L	10	1.11	ND	88	75-125%	---	---	
Nickel	125	5.00	10.0	ug/L	10	55.6	63.1	111	75-125%	---	---	
Selenium	27.2	5.00	10.0	ug/L	10	27.8	ND	98	75-125%	---	---	
Silver	169	1.00	2.00	ug/L	10	27.8	131	139	75-125%	---	---	Q-03
Thallium	27.6	1.00	2.00	ug/L	10	27.8	ND	99	75-125%	---	---	
Zinc	280	20.0	40.0	ug/L	10	55.6	212	123	75-125%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****QUALITY CONTROL (QC) SAMPLE RESULTS****Dissolved Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081139 - Matrix Matched Direct Inject						Water						
Blank (9081139-BLK1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:09							
EPA 6020A (Diss)												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	J, B-02
Copper	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Lead	0.132	0.100	0.200	ug/L	1	---	---	---	---	---	---	
LCS (9081139-BS1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:14							
EPA 6020A (Diss)												
Arsenic	52.6	0.500	1.00	ug/L	1	55.6	---	95	80-120%	---	---	B-02
Copper	53.7	0.500	1.00	ug/L	1	55.6	---	97	80-120%	---	---	
Lead	50.4	0.100	0.200	ug/L	1	55.6	---	91	80-120%	---	---	
Duplicate (9081139-DUP1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:53							
QC Source Sample: DP-1W (A9G0664-04)												
EPA 6020A (Diss)												
Arsenic	9.02	0.500	1.00	ug/L	1	---	9.17	---	---	2	20%	
Copper	7.79	0.500	1.00	ug/L	1	---	8.08	---	---	4	20%	
Lead	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Matrix Spike (9081139-MS1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:57							
QC Source Sample: DP-1W (A9G0664-04)												
EPA 6020A (Diss)												
Arsenic	59.3	0.500	1.00	ug/L	1	55.6	9.17	90	75-125%	---	---	B-02
Copper	55.2	0.500	1.00	ug/L	1	55.6	8.08	85	75-125%	---	---	
Lead	49.9	0.100	0.200	ug/L	1	55.6	ND	90	75-125%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071238							
A9G0664-02	Water	NWTPH-Dx	07/18/19 14:55	07/24/19 12:59	1060mL/5mL	1000mL/5mL	0.94
A9G0664-03	Water	NWTPH-Dx	07/18/19 16:35	07/24/19 12:59	1060mL/5mL	1000mL/5mL	0.94
A9G0664-04	Water	NWTPH-Dx	07/18/19 18:08	07/24/19 12:59	1060mL/5mL	1000mL/5mL	0.94

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

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071122							
A9G0664-02	Water	NWTPH-Gx (MS)	07/18/19 14:55	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-03	Water	NWTPH-Gx (MS)	07/18/19 16:35	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-04	Water	NWTPH-Gx (MS)	07/18/19 18:08	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071122							
A9G0664-01	Water	EPA 8260C	07/18/19 10:00	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-02	Water	EPA 8260C	07/18/19 14:55	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-03	Water	EPA 8260C	07/18/19 16:35	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-04	Water	EPA 8260C	07/18/19 18:08	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-05	Water	EPA 8260C	07/18/19 12:00	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260C SIM

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080549							
A9G0664-02	Water	EPA 8260C SIM	07/18/19 14:55	08/01/19 15:08	5mL/5mL	5mL/5mL	1.00
A9G0664-03	Water	EPA 8260C SIM	07/18/19 16:35	08/01/19 15:08	5mL/5mL	5mL/5mL	1.00
A9G0664-04	Water	EPA 8260C SIM	07/18/19 18:08	08/01/19 15:08	5mL/5mL	5mL/5mL	1.00

Polychlorinated Biphenyls by EPA 8082A

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****SAMPLE PREPARATION INFORMATION****Polychlorinated Biphenyls by EPA 8082A****Prep: EPA 3510C (Neutral pH)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071362							
A9G0664-02	Water	EPA 8082A	07/18/19 14:55	07/29/19 13:08	1050mL/2mL	1000mL/2mL	0.95
A9G0664-03	Water	EPA 8082A	07/18/19 16:35	07/29/19 13:08	1050mL/2mL	1000mL/2mL	0.95
A9G0664-04	Water	EPA 8082A	07/18/19 18:08	07/29/19 13:08	1030mL/2mL	1000mL/2mL	0.97

Semivolatile Organic Compounds by EPA 8270D**Prep: EPA 3510C (Acid/Base Neutral)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071208							
A9G0664-02RE2	Water	EPA 8270D	07/18/19 14:55	07/24/19 07:02	1060mL/1mL	1000mL/1mL	0.94
A9G0664-04RE1	Water	EPA 8270D	07/18/19 18:08	07/24/19 07:02	1070mL/1mL	1000mL/1mL	0.94
Batch: 9071294							
A9G0664-03RE2	Water	EPA 8270D	07/18/19 16:35	07/25/19 13:03	1070mL/1mL	1000mL/1mL	0.94

Total Metals by EPA 6020A (ICPMS)**Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071319							
A9G0664-02	Water	EPA 6020A	07/18/19 14:55	07/26/19 10:44	45mL/50mL	45mL/50mL	1.00
A9G0664-03	Water	EPA 6020A	07/18/19 16:35	07/26/19 10:44	45mL/50mL	45mL/50mL	1.00
A9G0664-04	Water	EPA 6020A	07/18/19 18:08	07/26/19 10:44	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020A (ICPMS)**Prep: Matrix Matched Direct Inject**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9081139							
A9G0664-02	Water	EPA 6020A (Diss)	07/18/19 14:55	08/20/19 08:21	45mL/50mL	45mL/50mL	1.00
A9G0664-03	Water	EPA 6020A (Diss)	07/18/19 16:35	08/20/19 08:21	45mL/50mL	45mL/50mL	1.00
A9G0664-04	Water	EPA 6020A (Diss)	07/18/19 18:08	08/20/19 08:21	45mL/50mL	45mL/50mL	1.00

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALIFIER DEFINITIONS

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

Apex Laboratories

- 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-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.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-24** The RPD for this spike and spike duplicate is above established control limits. Recoveries for both the spike and spike duplicate are within control limits.
- Q-29** Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- 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-52** Due to erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +12%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +15%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -14%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260C, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C
- S-06** Surrogate recovery is outside of established control limits.
- V-01** Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

Apex Laboratories

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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

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.

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

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

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 provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A9 G0664Project/Project #: BCSAmerica-1-01-02

Delivery Info:

Date/time received: 7/19/19 @ 1503 By: AKKDelivered by: Apex ☒ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐Cooler Inspection Date/time inspected: 7/19/19 @ 1503 By: AKKChain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒Signed/dated by client? Yes ☒ No ☐Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.5</u>	<u>1.0</u>					
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>					
Temp. blanks? (Y/N)	<u>N</u>	<u>N</u>					
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>					
Condition:	<u>Good</u>	<u>Good</u>					

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 ☒ NAOut of temperature samples form initiated? Yes/No ☒ NASamples Inspection Date/time inspected: 7/20/19 @ 1035 By: JSAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☐ NA ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments:

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐

Comments:

Additional information:

Labeled by: W Witness: JS Cooler Inspected by: MK See Project Contact Form: Y

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

Thursday, August 29, 2019

Kyle Haggart
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A9G0676 - BCSAmerica-1-01-02 - [none]

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 A9G0676, which was received by the laboratory on 7/19/2019 at 3:03:00PM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.0 degC	Cooler #2	4.9 degC
Cooler #3	2.2 degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-1(5-6.5)	A9G0676-01	Soil	07/18/19 10:25	07/19/19 15:03
DP-1(11-12.5)	A9G0676-02	Soil	07/18/19 10:32	07/19/19 15:03
DP-1(15-16.5)	A9G0676-03	Soil	07/18/19 10:40	07/19/19 15:03
DP-1(21-22.5)	A9G0676-04	Soil	07/18/19 10:50	07/19/19 15:03
DP-1(27.5-29)	A9G0676-05	Soil	07/18/19 11:00	07/19/19 15:03
DP-2(11-12.5)	A9G0676-06	Soil	07/18/19 11:15	07/19/19 15:03
DP-2(16.5-18)	A9G0676-07	Soil	07/18/19 11:20	07/19/19 15:03
DP-2(21-22.5)	A9G0676-08	Soil	07/18/19 11:35	07/19/19 15:03
DP-2(25-26.5)	A9G0676-09	Soil	07/18/19 11:40	07/19/19 15:03
DP-3(10-11.5)	A9G0676-10	Soil	07/18/19 12:00	07/19/19 15:03
DP-3(22-23.5)	A9G0676-11	Soil	07/18/19 12:18	07/19/19 15:03
DP-4(6.5-8)	A9G0676-12	Soil	07/19/19 08:20	07/19/19 15:03
DP-4(11.5-13)	A9G0676-13	Soil	07/19/19 08:25	07/19/19 15:03
DP-4(16.5-18)	A9G0676-14	Soil	07/19/19 08:30	07/19/19 15:03
DP-5(6-7.5)	A9G0676-15	Soil	07/19/19 08:47	07/19/19 15:03
DP-5(10-11.5)	A9G0676-16	Soil	07/19/19 08:55	07/19/19 15:03
DP-5(15-16.5)	A9G0676-17	Soil	07/19/19 09:00	07/19/19 15:03
DP-6(2-3.5)	A9G0676-18	Soil	07/19/19 09:10	07/19/19 15:03
DP-6(6.5-8)	A9G0676-19	Soil	07/19/19 09:15	07/19/19 15:03
DP-6(12-13.5)	A9G0676-20	Soil	07/19/19 09:20	07/19/19 15:03
DP-6(17-18.5)	A9G0676-21	Soil	07/19/19 09:25	07/19/19 15:03
DP-7(1-2.5)	A9G0676-22	Soil	07/19/19 09:30	07/19/19 15:03
DP-7(6.5-8)	A9G0676-23	Soil	07/19/19 09:35	07/19/19 15:03
DP-7(11.5-13)	A9G0676-24	Soil	07/19/19 09:40	07/19/19 15:03
DP-7(16.5-18)	A9G0676-25	Soil	07/19/19 09:45	07/19/19 15:03
DP-8(1.5-3)	A9G0676-26	Soil	07/19/19 09:50	07/19/19 15:03
DP-8(6.5-8)	A9G0676-27	Soil	07/19/19 09:55	07/19/19 15:03
DP-8(11.5-13)	A9G0676-28	Soil	07/19/19 09:58	07/19/19 15:03
DP-8(17-18.5)	A9G0676-29	Soil	07/19/19 10:00	07/19/19 15:03
DP-9(1-2.5)	A9G0676-30	Soil	07/19/19 10:10	07/19/19 15:03
DP-9(6.5-8)	A9G0676-31	Soil	07/19/19 10:15	07/19/19 15:03
DP-9(11-12.5)	A9G0676-32	Soil	07/19/19 10:20	07/19/19 15:03
DP-9(16.5-18)	A9G0676-33	Soil	07/19/19 10:25	07/19/19 15:03

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL REPORT FOR SAMPLES**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-10(1.5-3)	A9G0676-34	Soil	07/19/19 10:30	07/19/19 15:03
DP-10(6-7.5)	A9G0676-35	Soil	07/19/19 10:35	07/19/19 15:03
DP-10(11.5-13)	A9G0676-36	Soil	07/19/19 10:40	07/19/19 15:03
DP-10(16.5-18)	A9G0676-37	Soil	07/19/19 10:45	07/19/19 15:03
DP-11(6-7.5)	A9G0676-38	Soil	07/19/19 10:50	07/19/19 15:03
DP-11(10-11.5)	A9G0676-39	Soil	07/19/19 10:55	07/19/19 15:03
DP-11(16.5-18)	A9G0676-40	Soil	07/19/19 11:00	07/19/19 15:03
DP-12(0.5-2)	A9G0676-41	Soil	07/19/19 11:10	07/19/19 15:03
DP-12(5-6.5)	A9G0676-42	Soil	07/19/19 11:15	07/19/19 15:03
DP-12(10-11.5)	A9G0676-43	Soil	07/19/19 11:20	07/19/19 15:03
DP-12(16.5-18)	A9G0676-44	Soil	07/19/19 11:25	07/19/19 15:03
DP-13(1.5-3)	A9G0676-45	Soil	07/19/19 11:30	07/19/19 15:03
DP-13(5-6.5)	A9G0676-46	Soil	07/19/19 11:35	07/19/19 15:03
DP-13(10-11.5)	A9G0676-47	Soil	07/19/19 11:40	07/19/19 15:03

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071293		
Diesel	ND	11.1	25.0	mg/kg dry	1	07/25/19 23:44	NWTPH-Dx	
Oil	ND	22.2	50.0	mg/kg dry	1	07/25/19 23:44	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %	1	07/25/19 23:44	NWTPH-Dx	
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.64	25.0	mg/kg dry	1	07/26/19 00:06	NWTPH-Dx	
Oil	ND	19.3	50.0	mg/kg dry	1	07/26/19 00:06	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %	1	07/26/19 00:06	NWTPH-Dx	
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.81	25.0	mg/kg dry	1	07/26/19 00:27	NWTPH-Dx	
Oil	261	19.6	50.0	mg/kg dry	1	07/26/19 00:27	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/26/19 00:27	NWTPH-Dx	
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080541		
Diesel	ND	11.6	25.0	mg/kg dry	1	08/01/19 21:16	NWTPH-Dx	
Oil	ND	23.3	50.0	mg/kg dry	1	08/01/19 21:16	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %	1	08/01/19 21:16	NWTPH-Dx	
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.77	25.0	mg/kg dry	1	07/26/19 00:49	NWTPH-Dx	
Oil	ND	19.5	50.0	mg/kg dry	1	07/26/19 00:49	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %	1	07/26/19 00:49	NWTPH-Dx	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.90	25.0	mg/kg dry	1	07/26/19 01:10	NWTPH-Dx	
Oil	ND	19.8	50.0	mg/kg dry	1	07/26/19 01:10	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %	1	07/26/19 01:10	NWTPH-Dx	
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.6	25.0	mg/kg dry	1	07/26/19 01:32	NWTPH-Dx	
Oil	ND	21.3	50.0	mg/kg dry	1	07/26/19 01:32	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %	1	07/26/19 01:32	NWTPH-Dx	

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071293		
Diesel	ND	9.72	25.0	mg/kg dry	1	07/26/19 01:54	NWTPH-Dx	
Oil	ND	19.4	50.0	mg/kg dry	1	07/26/19 01:54	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %	1	07/26/19 01:54	NWTPH-Dx	
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.4	25.0	mg/kg dry	1	07/26/19 02:15	NWTPH-Dx	
Oil	ND	20.7	50.0	mg/kg dry	1	07/26/19 02:15	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 100 %		Limits: 50-150 %	1	07/26/19 02:15	NWTPH-Dx	
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.1	25.0	mg/kg dry	1	07/26/19 08:08	NWTPH-Dx	
Oil	ND	20.1	50.0	mg/kg dry	1	07/26/19 08:08	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 106 %		Limits: 50-150 %	1	07/26/19 08:08	NWTPH-Dx	
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.6	25.0	mg/kg dry	1	07/26/19 08:28	NWTPH-Dx	
Oil	ND	21.3	50.0	mg/kg dry	1	07/26/19 08:28	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 107 %		Limits: 50-150 %	1	07/26/19 08:28	NWTPH-Dx	
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071293		
Diesel	ND	10.3	25.0	mg/kg dry	1	07/26/19 09:29	NWTPH-Dx	
Oil	ND	20.5	50.0	mg/kg dry	1	07/26/19 09:29	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %	1	07/26/19 09:29	NWTPH-Dx	
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071293		
Diesel	ND	218	436	mg/kg dry	20	07/26/19 07:28	NWTPH-Dx	
Oil	972	436	871	mg/kg dry	20	07/26/19 07:28	NWTPH-Dx	F-03
Surrogate: o-Terphenyl (Surr)		Recovery: %		Limits: 50-150 %	20	07/26/19 07:28	NWTPH-Dx	S-01
DP-11(10-11.5) (A9G0676-39)				Matrix: Soil		Batch: 9080541		
Diesel	ND	10.6	25.0	mg/kg dry	1	08/01/19 22:01	NWTPH-Dx	
Oil	ND	21.2	50.0	mg/kg dry	1	08/01/19 22:01	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 108 %		Limits: 50-150 %	1	08/01/19 22:01	NWTPH-Dx	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071293		
Diesel	ND	213	426	mg/kg dry	20	07/26/19 08:08	NWTPH-Dx	
Oil	1360	426	852	mg/kg dry	20	07/26/19 08:08	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: %	Limits: 50-150 %	20	07/26/19 08:08	NWTPH-Dx	S-01	
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil		Batch: 9080541		
Diesel	ND	10.0	25.0	mg/kg dry	1	08/01/19 22:23	NWTPH-Dx	
Oil	ND	20.1	50.0	mg/kg dry	1	08/01/19 22:23	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 103 %	Limits: 50-150 %	1	08/01/19 22:23	NWTPH-Dx		
DP-13(5-6.5) (A9G0676-46RE1)				Matrix: Soil		Batch: 9071293		
Diesel	ND	315	630	mg/kg dry	25	07/26/19 11:50	NWTPH-Dx	
Oil	1680	630	1260	mg/kg dry	25	07/26/19 11:50	NWTPH-Dx	F-03
Surrogate: o-Terphenyl (Surr)		Recovery: %	Limits: 50-150 %	25	07/26/19 11:50	NWTPH-Dx	S-01	
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080541		
Diesel	ND	10.3	25.0	mg/kg dry	1	08/01/19 22:44	NWTPH-Dx	
Oil	ND	20.5	50.0	mg/kg dry	1	08/01/19 22:44	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 105 %	Limits: 50-150 %	1	08/01/19 22:44	NWTPH-Dx		

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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
DP-1(11-12.5) (A9G0676-02)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	3.04	6.08	mg/kg dry	50	07/24/19 02:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 85 %	Limits: 50-150 %	1	07/24/19 02:17	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		84 %	50-150 %	1	07/24/19 02:17	NWTPH-Gx (MS)		
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	3.10	6.20	mg/kg dry	50	07/24/19 03:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 86 %	Limits: 50-150 %	1	07/24/19 03:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		84 %	50-150 %	1	07/24/19 03:12	NWTPH-Gx (MS)		
DP-2(21-22.5) (A9G0676-08)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.89	5.78	mg/kg dry	50	07/24/19 03:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 88 %	Limits: 50-150 %	1	07/24/19 03:39	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		85 %	50-150 %	1	07/24/19 03:39	NWTPH-Gx (MS)		
DP-3(10-11.5) (A9G0676-10)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.83	5.65	mg/kg dry	50	07/24/19 04:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 85 %	Limits: 50-150 %	1	07/24/19 04:07	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		85 %	50-150 %	1	07/24/19 04:07	NWTPH-Gx (MS)		
DP-4(11.5-13) (A9G0676-13)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.87	5.75	mg/kg dry	50	07/24/19 04:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 89 %	Limits: 50-150 %	1	07/24/19 04:34	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		86 %	50-150 %	1	07/24/19 04:34	NWTPH-Gx (MS)		
DP-5(10-11.5) (A9G0676-16)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	3.12	6.23	mg/kg dry	50	07/24/19 05:01	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 90 %	Limits: 50-150 %	1	07/24/19 05:01	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		86 %	50-150 %	1	07/24/19 05:01	NWTPH-Gx (MS)		
DP-6(12-13.5) (A9G0676-20)		Matrix: Soil			Batch: 9071206			
Gasoline Range Organics	ND	2.76	5.53	mg/kg dry	50	07/24/19 05:56	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 92 %	Limits: 50-150 %	1	07/24/19 05:56	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		88 %	50-150 %	1	07/24/19 05:56	NWTPH-Gx (MS)		
DP-7(11.5-13) (A9G0676-24)		Matrix: Soil			Batch: 9071206			

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	ND	2.59	5.18	mg/kg dry	50	07/24/19 06:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 93 %	Limits: 50-150 %	1	07/24/19 06:23	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		89 %	50-150 %	1	07/24/19 06:23	NWTPH-Gx (MS)		
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	ND	3.01	6.02	mg/kg dry	50	07/24/19 07:18	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 94 %	Limits: 50-150 %	1	07/24/19 07:18	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		89 %	50-150 %	1	07/24/19 07:18	NWTPH-Gx (MS)		
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	ND	3.18	6.35	mg/kg dry	50	07/24/19 07:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 94 %	Limits: 50-150 %	1	07/24/19 07:45	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		90 %	50-150 %	1	07/24/19 07:45	NWTPH-Gx (MS)		
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
Gasoline Range Organics	ND	3.24	6.48	mg/kg dry	50	07/24/19 16:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 83 %	Limits: 50-150 %	1	07/24/19 16:13	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		83 %	50-150 %	1	07/24/19 16:13	NWTPH-Gx (MS)		
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Gasoline Range Organics	15.0	3.26	6.52	mg/kg dry	50	07/24/19 17:08	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 88 %	Limits: 50-150 %	1	07/24/19 17:08	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		83 %	50-150 %	1	07/24/19 17:08	NWTPH-Gx (MS)		
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
Gasoline Range Organics	4.42	2.62	5.24	mg/kg dry	50	08/02/19 19:17	NWTPH-Gx (MS)	J
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 108 %	Limits: 50-150 %	1	08/02/19 19:17	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		110 %	50-150 %	1	08/02/19 19:17	NWTPH-Gx (MS)		
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	14.5	2.83	5.65	mg/kg dry	50	07/24/19 08:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 99 %	Limits: 50-150 %	1	07/24/19 08:13	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		91 %	50-150 %	1	07/24/19 08:13	NWTPH-Gx (MS)		
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Gasoline Range Organics	ND	2.99	5.97	mg/kg dry	50	08/02/19 19:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 103 %	Limits: 50-150 %	1	08/02/19 19:45	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		109 %	50-150 %	1	08/02/19 19:45	NWTPH-Gx (MS)		
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071206		
Gasoline Range Organics	22.0	3.90	7.80	mg/kg dry	50	07/24/19 08:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 101 %	Limits: 50-150 %	1	07/24/19 08:40	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		89 %	50-150 %	1	07/24/19 08:40	NWTPH-Gx (MS)		
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080584		
Gasoline Range Organics	ND	3.38	6.77	mg/kg dry	50	08/02/19 20:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery: 109 %	Limits: 50-150 %	1	08/02/19 20:12	NWTPH-Gx (MS)		
1,4-Difluorobenzene (Sur)		113 %	50-150 %	1	08/02/19 20:12	NWTPH-Gx (MS)		

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.608	1.22	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Acrylonitrile	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Benzene	ND	0.00608	0.0122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromochloromethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromodichloromethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromoform	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Bromomethane	ND	0.608	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2-Butanone (MEK)	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
n-Butylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
sec-Butylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
tert-Butylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Carbon disulfide	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Carbon tetrachloride	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chloroethane	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chloroform	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Chloromethane	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2-Chlorotoluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
4-Chlorotoluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Dibromochloromethane	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Dibromomethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Dichlorodifluoromethane	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1-Dichloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1-Dichloroethene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071206		
1,2-Dichloropropane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,3-Dichloropropane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2,2-Dichloropropane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1-Dichloropropene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Ethylbenzene	ND	0.0304	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Hexachlorobutadiene	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
2-Hexanone	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Isopropylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
4-Isopropyltoluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Methylene chloride	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.304	0.608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Naphthalene	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
n-Propylbenzene	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Styrene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Toluene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.152	0.304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Trichloroethene (TCE)	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Trichlorofluoromethane	ND	0.0608	0.122	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
Vinyl chloride	ND	0.0152	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
m,p-Xylene	ND	0.0304	0.0608	mg/kg dry	50	07/24/19 02:17	5035A/8260C	
o-Xylene	ND	0.0304	0.0304	mg/kg dry	50	07/24/19 02:17	5035A/8260C	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)		Matrix: Soil			Batch: 9071206			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 105 %	Limits: 80-120 %	1	07/24/19 02:17	5035A/8260C		
Toluene-d8 (Surr)		98 %	80-120 %	1	07/24/19 02:17	5035A/8260C		
4-Bromofluorobenzene (Surr)		99 %	80-120 %	1	07/24/19 02:17	5035A/8260C		
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.620	1.24	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Acrylonitrile	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Benzene	ND	0.00620	0.0124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromochloromethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromodichloromethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromoform	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Bromomethane	ND	0.620	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2-Butanone (MEK)	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
n-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
sec-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
tert-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Carbon disulfide	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Carbon tetrachloride	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chloroethane	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chloroform	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Chloromethane	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
4-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Dibromochloromethane	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Dibromomethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Dichlorodifluoromethane	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1-Dichloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071206		
1,2-Dichloroethane (EDC)	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2-Dichloropropane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,3-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2,2-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Ethylbenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Hexachlorobutadiene	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
2-Hexanone	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Isopropylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
4-Isopropyltoluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Methylene chloride	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.310	0.620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Naphthalene	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
n-Propylbenzene	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Styrene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Toluene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Trichloroethene (TCE)	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Trichlorofluoromethane	ND	0.0620	0.124	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071206			
1,3,5-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
Vinyl chloride	ND	0.0155	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
m,p-Xylene	ND	0.0310	0.0620	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
o-Xylene	ND	0.0310	0.0310	mg/kg dry	50	07/24/19 03:12	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 03:12</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 03:12</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 03:12</i>	<i>5035A/8260C</i>	
DP-2(21-22.5) (A9G0676-08)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.578	1.16	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Acrylonitrile	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Benzene	ND	0.00578	0.0116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromochloromethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromodichloromethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromoform	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Bromomethane	ND	0.578	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2-Butanone (MEK)	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
n-Butylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
sec-Butylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
tert-Butylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Carbon disulfide	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Carbon tetrachloride	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chloroethane	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chloroform	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Chloromethane	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2-Chlorotoluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
4-Chlorotoluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Dibromochloromethane	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Dibromomethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071206		
1,3-Dichlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Dichlorodifluoromethane	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1-Dichloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1-Dichloroethene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2-Dichloropropane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,3-Dichloropropane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2,2-Dichloropropane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1-Dichloropropene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Ethylbenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Hexachlorobutadiene	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
2-Hexanone	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Isopropylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
4-Isopropyltoluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Methylene chloride	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.289	0.578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Naphthalene	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
n-Propylbenzene	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Styrene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Tetrachloroethene (PCE)	0.0150	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	J
Toluene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.144	0.289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil	Batch: 9071206			
Trichloroethene (TCE)	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Trichlorofluoromethane	ND	0.0578	0.116	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Vinyl chloride	ND	0.0144	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
m,p-Xylene	ND	0.0289	0.0578	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
o-Xylene	ND	0.0289	0.0289	mg/kg dry	50	07/24/19 03:39	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %	1	07/24/19 03:39	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 03:39	5035A/8260C	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	07/24/19 03:39	5035A/8260C	
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil	Batch: 9080523			
Acetone	ND	0.749	1.50	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Acrylonitrile	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Benzene	ND	0.00749	0.0150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromochloromethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromodichloromethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromoform	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Bromomethane	ND	0.749	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2-Butanone (MEK)	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
n-Butylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
sec-Butylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
tert-Butylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Carbon disulfide	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Carbon tetrachloride	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chloroethane	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chloroform	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Chloromethane	ND	0.187	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2-Chlorotoluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
4-Chlorotoluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Dibromochloromethane	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080523		
1,2-Dibromo-3-chloropropane	ND	0.187	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Dibromomethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Dichlorodifluoromethane	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1-Dichloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1-Dichloroethene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2-Dichloropropane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,3-Dichloropropane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2,2-Dichloropropane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1-Dichloropropene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Ethylbenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Hexachlorobutadiene	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
2-Hexanone	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Isopropylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
4-Isopropyltoluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Methylene chloride	ND	0.374	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.374	0.749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Naphthalene	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
n-Propylbenzene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Styrene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Toluene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080523		
1,2,3-Trichlorobenzene	ND	0.187	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.374	0.374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Trichloroethene (TCE)	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Trichlorofluoromethane	ND	0.0749	0.150	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
Vinyl chloride	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
m,p-Xylene	ND	0.0374	0.0749	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
o-Xylene	ND	0.0187	0.0374	mg/kg dry	50	08/01/19 16:59	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	115 %	<i>Limits:</i>	80-120 %	1	08/01/19 16:59	5035A/8260C
<i>Toluene-d8 (Surr)</i>			101 %		80-120 %	1	08/01/19 16:59	5035A/8260C
<i>4-Bromofluorobenzene (Surr)</i>			100 %		80-120 %	1	08/01/19 16:59	5035A/8260C
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.565	1.13	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Acrylonitrile	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Benzene	ND	0.00565	0.0113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromochloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromodichloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromoform	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Bromomethane	ND	0.565	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2-Butanone (MEK)	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
n-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
sec-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
tert-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Carbon disulfide	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Carbon tetrachloride	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Chlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Chloroethane	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Chloroform	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071206		
Chloromethane	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
4-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Dibromochloromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Dibromomethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Dichlorodifluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1-Dichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2-Dichloropropane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,3-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2,2-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Ethylbenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Hexachlorobutadiene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
2-Hexanone	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Isopropylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
4-Isopropyltoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Methylene chloride	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.283	0.565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Naphthalene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
n-Propylbenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Styrene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071206		
1,1,1,2-Tetrachloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Toluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Trichloroethene (TCE)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Trichlorofluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Vinyl chloride	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
m,p-Xylene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
o-Xylene	ND	0.0283	0.0283	mg/kg dry	50	07/24/19 04:07	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %	1	07/24/19 04:07	5035A/8260C	
Toluene-d8 (Surr)		100 %		80-120 %	1	07/24/19 04:07	5035A/8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/24/19 04:07	5035A/8260C	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.575	1.15	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Acrylonitrile	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Benzene	ND	0.00575	0.0115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromochloromethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromodichloromethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromoform	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Bromomethane	ND	0.575	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2-Butanone (MEK)	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
n-Butylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
sec-Butylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
tert-Butylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Carbon disulfide	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071206		
Carbon tetrachloride	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chloroethane	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chloroform	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Chloromethane	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2-Chlorotoluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
4-Chlorotoluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Dibromochloromethane	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Dibromomethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Dichlorodifluoromethane	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1-Dichloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1-Dichloroethene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2-Dichloropropane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,3-Dichloropropane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2,2-Dichloropropane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1-Dichloropropene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Ethylbenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Hexachlorobutadiene	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
2-Hexanone	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Isopropylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
4-Isopropyltoluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Methylene chloride	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.287	0.575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071206		
Methyl tert-butyl ether (MTBE)	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Naphthalene	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
n-Propylbenzene	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Styrene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Toluene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.144	0.287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Trichloroethene (TCE)	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Trichlorofluoromethane	ND	0.0575	0.115	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
Vinyl chloride	ND	0.0144	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
m,p-Xylene	ND	0.0287	0.0575	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
o-Xylene	ND	0.0287	0.0287	mg/kg dry	50	07/24/19 04:34	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 96 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 04:34</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 04:34</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 04:34</i>	<i>5035A/8260C</i>	

DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.623	1.25	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Acrylonitrile	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Benzene	ND	0.00623	0.0125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromochloromethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromodichloromethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromoform	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Bromomethane	ND	0.623	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2-Butanone (MEK)	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071206		
n-Butylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
sec-Butylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
tert-Butylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Carbon disulfide	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Carbon tetrachloride	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chloroethane	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chloroform	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Chloromethane	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2-Chlorotoluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
4-Chlorotoluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Dibromochloromethane	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Dibromomethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Dichlorodifluoromethane	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1-Dichloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1-Dichloroethene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2-Dichloropropane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,3-Dichloropropane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2,2-Dichloropropane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1-Dichloropropene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Ethylbenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Hexachlorobutadiene	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
2-Hexanone	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071206		
Isopropylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
4-Isopropyltoluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Methylene chloride	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.312	0.623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Naphthalene	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
n-Propylbenzene	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Styrene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Toluene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.156	0.312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Trichloroethene (TCE)	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Trichlorofluoromethane	ND	0.0623	0.125	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Vinyl chloride	ND	0.0156	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
m,p-Xylene	ND	0.0312	0.0623	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
o-Xylene	ND	0.0312	0.0312	mg/kg dry	50	07/24/19 05:01	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 96 %		Limits: 80-120 %	1	07/24/19 05:01	5035A/8260C	
Toluene-d8 (Surr)		100 %		80-120 %	1	07/24/19 05:01	5035A/8260C	
4-Bromofluorobenzene (Surr)		99 %		80-120 %	1	07/24/19 05:01	5035A/8260C	

DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.657	1.31	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Acrylonitrile	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Benzene	ND	0.00657	0.0131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromochloromethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071206		
Bromodichloromethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromoform	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Bromomethane	ND	0.657	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2-Butanone (MEK)	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
n-Butylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
sec-Butylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
tert-Butylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Carbon disulfide	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Carbon tetrachloride	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chloroethane	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chloroform	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Chloromethane	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2-Chlorotoluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
4-Chlorotoluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Dibromochloromethane	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Dibromomethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Dichlorodifluoromethane	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1-Dichloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1-Dichloroethene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2-Dichloropropane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,3-Dichloropropane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2,2-Dichloropropane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1-Dichloropropene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071206		
trans-1,3-Dichloropropene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Ethylbenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Hexachlorobutadiene	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
2-Hexanone	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Isopropylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
4-Isopropyltoluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Methylene chloride	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.329	0.657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Naphthalene	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
n-Propylbenzene	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Styrene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Toluene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.164	0.329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Trichloroethene (TCE)	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Trichlorofluoromethane	ND	0.0657	0.131	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Vinyl chloride	ND	0.0164	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
m,p-Xylene	ND	0.0329	0.0657	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
o-Xylene	ND	0.0329	0.0329	mg/kg dry	50	07/24/19 05:29	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 80-120 %	1	07/24/19 05:29	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 05:29	5035A/8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/24/19 05:29	5035A/8260C	

DP-6(12-13.5) (A9G0676-20)

Matrix: Soil

Batch: 9071206

Acetone	ND	0.553	1.11	mg/kg dry	50	07/24/19 05:56	5035A/8260C

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071206		
Acrylonitrile	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Benzene	ND	0.00553	0.0111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromochloromethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromodichloromethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromoform	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Bromomethane	ND	0.553	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2-Butanone (MEK)	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
n-Butylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
sec-Butylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
tert-Butylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Carbon disulfide	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Carbon tetrachloride	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chloroethane	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chloroform	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Chloromethane	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2-Chlorotoluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
4-Chlorotoluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Dibromochloromethane	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Dibromomethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Dichlorodifluoromethane	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1-Dichloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1-Dichloroethene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2-Dichloropropane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071206		
1,3-Dichloropropane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2,2-Dichloropropane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1-Dichloropropene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Ethylbenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Hexachlorobutadiene	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
2-Hexanone	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Isopropylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
4-Isopropyltoluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Methylene chloride	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.276	0.553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Naphthalene	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
n-Propylbenzene	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Styrene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Toluene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.138	0.276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Trichloroethene (TCE)	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Trichlorofluoromethane	ND	0.0553	0.111	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Vinyl chloride	ND	0.0138	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
m,p-Xylene	ND	0.0276	0.0553	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
o-Xylene	ND	0.0276	0.0276	mg/kg dry	50	07/24/19 05:56	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 80-120 %	1	07/24/19 05:56	5035A/8260C	

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Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)		Matrix: Soil			Batch: 9071206			
Surrogate: Toluene-d8 (Surr)		Recovery: 98 %	Limits: 80-120 %	1	07/24/19 05:56	5035A/8260C		
4-Bromofluorobenzene (Surr)		100 %	80-120 %	1	07/24/19 05:56	5035A/8260C		
DP-7(11.5-13) (A9G0676-24)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.518	1.04	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Acrylonitrile	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Benzene	ND	0.00518	0.0104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromochloromethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromodichloromethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromoform	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Bromomethane	ND	0.518	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2-Butanone (MEK)	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
n-Butylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
sec-Butylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
tert-Butylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Carbon disulfide	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Carbon tetrachloride	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chloroethane	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chloroform	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Chloromethane	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2-Chlorotoluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
4-Chlorotoluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Dibromochloromethane	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Dibromomethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Dichlorodifluoromethane	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1-Dichloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071206		
1,1-Dichloroethene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2-Dichloropropane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,3-Dichloropropane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2,2-Dichloropropane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1-Dichloropropene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Ethylbenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Hexachlorobutadiene	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
2-Hexanone	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Isopropylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
4-Isopropyltoluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Methylene chloride	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.259	0.518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Naphthalene	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
n-Propylbenzene	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Styrene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Toluene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.129	0.259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Trichloroethene (TCE)	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
Trichlorofluoromethane	ND	0.0518	0.104	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-7(11.5-13) (A9G0676-24)		Matrix: Soil			Batch: 9071206			
Vinyl chloride	ND	0.0129	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
m,p-Xylene	ND	0.0259	0.0518	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
o-Xylene	ND	0.0259	0.0259	mg/kg dry	50	07/24/19 06:23	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 89 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 06:23</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 06:23</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 06:23</i>	<i>5035A/8260C</i>	
DP-8(11.5-13) (A9G0676-28)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.602	1.20	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Acrylonitrile	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Benzene	ND	0.00602	0.0120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromochloromethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromodichloromethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromoform	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Bromomethane	ND	0.602	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2-Butanone (MEK)	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
n-Butylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
sec-Butylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
tert-Butylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Carbon disulfide	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Carbon tetrachloride	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chloroethane	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chloroform	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Chloromethane	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2-Chlorotoluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
4-Chlorotoluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Dibromochloromethane	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Dibromomethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071206		
1,4-Dichlorobenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Dichlorodifluoromethane	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1-Dichloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1-Dichloroethene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2-Dichloropropane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,3-Dichloropropane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2,2-Dichloropropane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1-Dichloropropene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Ethylbenzene	ND	0.0301	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Hexachlorobutadiene	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
2-Hexanone	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Isopropylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
4-Isopropyltoluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Methylene chloride	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.301	0.602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Naphthalene	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
n-Propylbenzene	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Styrene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Toluene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.151	0.301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Trichloroethene (TCE)	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-8(11.5-13) (A9G0676-28)		Matrix: Soil			Batch: 9071206			
Trichlorofluoromethane	ND	0.0602	0.120	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
Vinyl chloride	ND	0.0151	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
m,p-Xylene	ND	0.0301	0.0602	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
o-Xylene	ND	0.0301	0.0301	mg/kg dry	50	07/24/19 07:18	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 86 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 07:18</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 07:18</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 07:18</i>	<i>5035A/8260C</i>	
DP-9(11-12.5) (A9G0676-32)		Matrix: Soil			Batch: 9071206			
Acetone	ND	0.635	1.27	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Acrylonitrile	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Benzene	ND	0.00635	0.0127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromochloromethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromodichloromethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromoform	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Bromomethane	ND	0.635	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2-Butanone (MEK)	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
n-Butylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
sec-Butylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
tert-Butylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Carbon disulfide	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Carbon tetrachloride	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chloroethane	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chloroform	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Chloromethane	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2-Chlorotoluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
4-Chlorotoluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Dibromochloromethane	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071206		
1,2-Dibromoethane (EDB)	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Dibromomethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Dichlorodifluoromethane	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1-Dichloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1-Dichloroethene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2-Dichloropropane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,3-Dichloropropane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2,2-Dichloropropane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1-Dichloropropene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Ethylbenzene	ND	0.0318	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Hexachlorobutadiene	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
2-Hexanone	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Isopropylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
4-Isopropyltoluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Methylene chloride	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.318	0.635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Naphthalene	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
n-Propylbenzene	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Styrene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Toluene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071206		
1,2,4-Trichlorobenzene	ND	0.159	0.318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Trichloroethene (TCE)	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Trichlorofluoromethane	ND	0.0635	0.127	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Vinyl chloride	ND	0.0159	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
m,p-Xylene	ND	0.0318	0.0635	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
o-Xylene	ND	0.0318	0.0318	mg/kg dry	50	07/24/19 07:45	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 87 %		Limits: 80-120 %	1	07/24/19 07:45	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 07:45	5035A/8260C	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	07/24/19 07:45	5035A/8260C	
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
Acetone	ND	0.648	1.30	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Acrylonitrile	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Benzene	ND	0.00648	0.0130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromochloromethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromodichloromethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromoform	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Bromomethane	ND	0.648	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
2-Butanone (MEK)	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
n-Butylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
sec-Butylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
tert-Butylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Carbon disulfide	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Carbon tetrachloride	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chloroethane	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chloroform	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Chloromethane	ND	0.324	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
2-Chlorotoluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
4-Chlorotoluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Dibromochloromethane	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Dibromomethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Dichlorodifluoromethane	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1-Dichloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2-Dichloropropane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,3-Dichloropropane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
2,2-Dichloropropane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1-Dichloropropene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Ethylbenzene	ND	0.0324	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Hexachlorobutadiene	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
2-Hexanone	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Isopropylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
4-Isopropyltoluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Methylene chloride	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.324	0.648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Naphthalene	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
n-Propylbenzene	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Styrene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071232		
1,1,2,2-Tetrachloroethane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Toluene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Trichloroethene (TCE)	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Trichlorofluoromethane	ND	0.0648	0.130	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
Vinyl chloride	ND	0.0162	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
m,p-Xylene	ND	0.0324	0.0648	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
o-Xylene	ND	0.0324	0.0324	mg/kg dry	50	07/24/19 16:13	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 16:13</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 16:13</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 16:13</i>	<i>5035A/8260C</i>	

DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Acetone	ND	0.652	1.30	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Acrylonitrile	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Benzene	ND	0.00652	0.0130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromochloromethane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromodichloromethane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromoform	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Bromomethane	ND	0.652	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2-Butanone (MEK)	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
n-Butylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
sec-Butylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
tert-Butylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Carbon disulfide	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Carbon tetrachloride	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Chlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Chloroethane	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Chloroform	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Chloromethane	ND	0.326	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2-Chlorotoluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
4-Chlorotoluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Dibromochloromethane	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Dibromomethane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Dichlorodifluoromethane	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1-Dichloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1-Dichloroethene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2-Dichloropropane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,3-Dichloropropane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2,2-Dichloropropane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1-Dichloropropene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Ethylbenzene	ND	0.0326	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Hexachlorobutadiene	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
2-Hexanone	ND	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Isopropylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
4-Isopropyltoluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Methylene chloride	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	0.831	0.326	0.652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071232		
Naphthalene	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
n-Propylbenzene	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Styrene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0652	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Tetrachloroethene (PCE)	0.0978	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Toluene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.163	0.326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Trichloroethene (TCE)	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Trichlorofluoromethane	ND	0.0652	0.130	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0326	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
Vinyl chloride	ND	0.0163	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
m,p-Xylene	ND	0.0652	0.0652	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
o-Xylene	0.0482	0.0326	0.0326	mg/kg dry	50	07/24/19 17:08	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	95 %	<i>Limits:</i>	80-120 %	1	07/24/19 17:08	5035A/8260C
<i>Toluene-d8 (Surr)</i>			99 %		80-120 %	1	07/24/19 17:08	5035A/8260C
<i>4-Bromofluorobenzene (Surr)</i>			100 %		80-120 %	1	07/24/19 17:08	5035A/8260C

DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
Acetone	ND	0.524	1.05	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Acrylonitrile	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Benzene	ND	0.00524	0.0105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromochloromethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromodichloromethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromoform	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Bromomethane	ND	0.524	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2-Butanone (MEK)	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
n-Butylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
sec-Butylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
tert-Butylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Carbon disulfide	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Carbon tetrachloride	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chloroethane	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chloroform	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Chloromethane	ND	0.131	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2-Chlorotoluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
4-Chlorotoluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Dibromochloromethane	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.131	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Dibromomethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Dichlorodifluoromethane	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1-Dichloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1-Dichloroethene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2-Dichloropropane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,3-Dichloropropane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2,2-Dichloropropane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1-Dichloropropene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Ethylbenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Hexachlorobutadiene	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
2-Hexanone	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Isopropylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080584		
4-Isopropyltoluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	A-01a
Methylene chloride	ND	0.367	0.367	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.262	0.524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Naphthalene	ND	0.105	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
n-Propylbenzene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Styrene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Toluene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.131	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.262	0.262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Trichloroethene (TCE)	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Trichlorofluoromethane	ND	0.0524	0.105	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Vinyl chloride	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
m,p-Xylene	ND	0.0262	0.0524	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
o-Xylene	ND	0.0131	0.0262	mg/kg dry	50	08/02/19 19:17	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 110 %		Limits: 80-120 %	1	08/02/19 19:17	5035A/8260C	
Toluene-d8 (Surr)		104 %		80-120 %	1	08/02/19 19:17	5035A/8260C	
4-Bromofluorobenzene (Surr)		93 %		80-120 %	1	08/02/19 19:17	5035A/8260C	

DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.565	1.13	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Acrylonitrile	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Benzene	ND	0.00565	0.0113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromochloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromodichloromethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Bromoform	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Bromomethane	ND	0.565	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2-Butanone (MEK)	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
n-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
sec-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
tert-Butylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Carbon disulfide	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Carbon tetrachloride	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chloroethane	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chloroform	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Chloromethane	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
4-Chlorotoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Dibromochloromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Dibromomethane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Dichlorodifluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1-Dichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2-Dichloropropane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,3-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2,2-Dichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071206		
Ethylbenzene	0.0153	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
Hexachlorobutadiene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
2-Hexanone	ND	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Isopropylbenzene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
4-Isopropyltoluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Methylene chloride	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	0.351	0.283	0.565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
Methyl tert-butyl ether (MTBE)	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Naphthalene	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
n-Propylbenzene	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Styrene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0565	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Tetrachloroethene (PCE)	0.105	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Toluene	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.141	0.283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Trichloroethene (TCE)	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Trichlorofluoromethane	ND	0.0565	0.113	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
1,2,4-Trimethylbenzene	0.0401	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
1,3,5-Trimethylbenzene	0.0571	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Vinyl chloride	ND	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
m,p-Xylene	0.0492	0.0283	0.0565	mg/kg dry	50	07/24/19 08:13	5035A/8260C	J
o-Xylene	0.0922	0.0141	0.0283	mg/kg dry	50	07/24/19 08:13	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 85 %		Limits: 80-120 %	1	07/24/19 08:13	5035A/8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/24/19 08:13	5035A/8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/24/19 08:13	5035A/8260C	

DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Acetone	ND	0.597	1.19	mg/kg dry	50	08/02/19 19:45	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Acrylonitrile	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Benzene	ND	0.00597	0.0119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromochloromethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromodichloromethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromoform	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Bromomethane	ND	0.597	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2-Butanone (MEK)	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
n-Butylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
sec-Butylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
tert-Butylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Carbon disulfide	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Carbon tetrachloride	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chloroethane	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chloroform	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Chloromethane	ND	0.149	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2-Chlorotoluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
4-Chlorotoluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Dibromochloromethane	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.149	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Dibromomethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Dichlorodifluoromethane	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1-Dichloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1-Dichloroethene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2-Dichloropropane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**
Project Number: [none]
Project Manager: **Kyle Haggart**

Report ID:
A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
1,3-Dichloropropane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2,2-Dichloropropane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1-Dichloropropene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Ethylbenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Hexachlorobutadiene	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
2-Hexanone	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Isopropylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
4-Isopropyltoluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Methylene chloride	ND	0.358	0.358	mg/kg dry	50	08/02/19 19:45	5035A/8260C	A-01a
4-Methyl-2-pentanone (MiBK)	ND	0.299	0.597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Naphthalene	ND	0.119	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
n-Propylbenzene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Styrene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Toluene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.149	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.299	0.299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Trichloroethene (TCE)	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Trichlorofluoromethane	ND	0.0597	0.119	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
Vinyl chloride	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
m,p-Xylene	ND	0.0299	0.0597	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
o-Xylene	ND	0.0149	0.0299	mg/kg dry	50	08/02/19 19:45	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 109 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>08/02/19 19:45</i>	<i>5035A/8260C</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080584		
Surrogate: Toluene-d8 (Surr)		Recovery: 105 %	Limits: 80-120 %	1	08/02/19 19:45	5035A/8260C		
4-Bromofluorobenzene (Surr)		97 %	80-120 %	1	08/02/19 19:45	5035A/8260C		
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071206		
Acetone	ND	0.780	1.56	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Acrylonitrile	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Benzene	ND	0.00780	0.0156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromochloromethane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromodichloromethane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromoform	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Bromomethane	ND	0.780	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2-Butanone (MEK)	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
n-Butylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
sec-Butylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
tert-Butylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Carbon disulfide	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Carbon tetrachloride	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chloroethane	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chloroform	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Chloromethane	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2-Chlorotoluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
4-Chlorotoluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Dibromochloromethane	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Dibromomethane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,4-Dichlorobenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Dichlorodifluoromethane	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1-Dichloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071206		
1,1-Dichloroethene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2-Dichloropropane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,3-Dichloropropane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2,2-Dichloropropane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1-Dichloropropene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Ethylbenzene	0.0195	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J
Hexachlorobutadiene	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
2-Hexanone	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Isopropylbenzene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
4-Isopropyltoluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Methylene chloride	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
4-Methyl-2-pentanone (MIBK)	ND	0.390	0.780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Naphthalene	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
n-Propylbenzene	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Styrene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0780	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Tetrachloroethene (PCE)	0.141	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Toluene	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.195	0.390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Trichloroethene (TCE)	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
Trichlorofluoromethane	ND	0.0780	0.156	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
1,2,4-Trimethylbenzene	0.0585	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J
1,3,5-Trimethylbenzene	0.0405	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)		Matrix: Soil			Batch: 9071206			
Vinyl chloride	ND	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
m,p-Xylene	0.0468	0.0390	0.0780	mg/kg dry	50	07/24/19 08:40	5035A/8260C	J
o-Xylene	0.0678	0.0195	0.0390	mg/kg dry	50	07/24/19 08:40	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 87 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/24/19 08:40</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 08:40</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/24/19 08:40</i>	<i>5035A/8260C</i>	
DP-13(10-11.5) (A9G0676-47)		Matrix: Soil			Batch: 9080584			
Acetone	ND	0.677	1.35	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Acrylonitrile	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Benzene	ND	0.00677	0.0135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromochloromethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromodichloromethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromoform	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Bromomethane	ND	0.677	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2-Butanone (MEK)	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
n-Butylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
sec-Butylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
tert-Butylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Carbon disulfide	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Carbon tetrachloride	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chloroethane	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chloroform	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Chloromethane	ND	0.169	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2-Chlorotoluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
4-Chlorotoluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Dibromochloromethane	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dibromo-3-chloropropane	ND	0.169	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dibromoethane (EDB)	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Dibromomethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dichlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,3-Dichlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080584		
1,4-Dichlorobenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Dichlorodifluoromethane	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1-Dichloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1-Dichloroethene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
cis-1,2-Dichloroethene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
trans-1,2-Dichloroethene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2-Dichloropropane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,3-Dichloropropane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2,2-Dichloropropane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1-Dichloropropene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
cis-1,3-Dichloropropene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
trans-1,3-Dichloropropene	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Ethylbenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Hexachlorobutadiene	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
2-Hexanone	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Isopropylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
4-Isopropyltoluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Methylene chloride	ND	0.338	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
4-Methyl-2-pentanone (MiBK)	ND	0.338	0.677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Methyl tert-butyl ether (MTBE)	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Naphthalene	ND	0.135	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
n-Propylbenzene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Styrene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,1,2-Tetrachloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,2,2-Tetrachloroethane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Tetrachloroethene (PCE)	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Toluene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,3-Trichlorobenzene	ND	0.169	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,4-Trichlorobenzene	ND	0.338	0.338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,1-Trichloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,1,2-Trichloroethane	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Trichloroethene (TCE)	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 5035A/8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil	Batch: 9080584			
Trichlorofluoromethane	ND	0.0677	0.135	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,3-Trichloropropane	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,2,4-Trimethylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
1,3,5-Trimethylbenzene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
Vinyl chloride	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
m,p-Xylene	ND	0.0338	0.0677	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
o-Xylene	ND	0.0169	0.0338	mg/kg dry	50	08/02/19 20:12	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 112 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>08/02/19 20:12</i>	<i>5035A/8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/02/19 20:12</i>	<i>5035A/8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>94 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/02/19 20:12</i>	<i>5035A/8260C</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1221	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1232	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1242	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1248	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1254	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
Aroclor 1260	ND	0.00541	0.0108	mg/kg dry	1	07/26/19 09:32	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 87 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 09:32</i>	<i>EPA 8082A</i>	
DP-2(11-12.5) (A9G0676-06)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1221	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1232	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1242	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1248	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1254	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1260	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 88 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 10:42</i>	<i>EPA 8082A</i>	
DP-2(21-22.5) (A9G0676-08)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1221	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1232	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1242	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1248	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1254	0.00942	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	J
Aroclor 1260	ND	0.00546	0.0109	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 91 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 11:18</i>	<i>EPA 8082A</i>	
DP-3(10-11.5) (A9G0676-10)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1221	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1232	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Polychlorinated Biphenyls by EPA 8082A**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1242	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1248	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1254	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1260	ND	0.00522	0.0104	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 88 %		Limits: 60-125 %	1	07/26/19 11:53	EPA 8082A	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1221	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1232	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1242	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1248	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1254	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1260	ND	0.00544	0.0109	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 83 %		Limits: 60-125 %	1	07/26/19 12:29	EPA 8082A	
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1221	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1232	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1242	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1248	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1254	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Aroclor 1260	ND	0.00523	0.0105	mg/kg dry	1	07/26/19 10:42	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 91 %		Limits: 60-125 %	1	07/26/19 10:42	EPA 8082A	
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1221	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1232	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1242	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1248	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
Aroclor 1254	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1260	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:18	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 90 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 11:18</i>	<i>EPA 8082A</i>		
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1221	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1232	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1242	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1248	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1254	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
Aroclor 1260	ND	0.00535	0.0107	mg/kg dry	1	07/26/19 11:53	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 92 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 11:53</i>	<i>EPA 8082A</i>		
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1221	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1232	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1242	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1248	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1254	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
Aroclor 1260	ND	0.00524	0.0105	mg/kg dry	1	07/26/19 12:29	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 85 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/26/19 12:29</i>	<i>EPA 8082A</i>		
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1221	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1232	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1242	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1248	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1254	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
Aroclor 1260	ND	0.00537	0.0107	mg/kg dry	1	07/29/19 08:44	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 97 %</i>	<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/29/19 08:44</i>	<i>EPA 8082A</i>		

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1221	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1232	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1242	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1248	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1254	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
Aroclor 1260	ND	0.00567	0.0113	mg/kg dry	1	07/29/19 09:19	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 89 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>07/29/19 09:19</i>	<i>EPA 8082A</i>	
DP-11(6-7.5) (A9G0676-38RE1)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1221	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1232	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1242	0.245	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	P-10
Aroclor 1248	ND	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	
Aroclor 1254	1.73	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	P-10
Aroclor 1260	0.505	0.0549	0.110	mg/kg dry	10	08/02/19 08:25	EPA 8082A	P-10
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 92 %</i>		<i>Limits: 60-125 %</i>	<i>10</i>	<i>08/02/19 08:25</i>	<i>EPA 8082A</i>	<i>S-05</i>
DP-11(10-11.5) (A9G0676-39)		Matrix: Soil			Batch: 9081235		C-07	
Aroclor 1016	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1221	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1232	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1242	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1248	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1254	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
Aroclor 1260	ND	0.00204	0.00407	mg/kg dry	1	08/22/19 13:08	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 98 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>08/22/19 13:08</i>	<i>EPA 8082A</i>	
DP-12(5-6.5) (A9G0676-42RE1)		Matrix: Soil			Batch: 9071261		C-07	
Aroclor 1016	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	
Aroclor 1221	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	
Aroclor 1232	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	

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Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Polychlorinated Biphenyls by EPA 8082A**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42RE1)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1242	2.27	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	P-10
Aroclor 1248	ND	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	
Aroclor 1254	9.32	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	P-10
Aroclor 1260	1.69	0.270	0.539	mg/kg dry	50	08/02/19 09:00	EPA 8082A	P-10
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 90 %		Limits: 60-125 %	50	08/02/19 09:00	EPA 8082A	S-05
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1016	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1221	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1232	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1242	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1248	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1254	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Aroclor 1260	ND	0.00203	0.00405	mg/kg dry	1	08/22/19 14:22	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 94 %		Limits: 60-125 %	1	08/22/19 14:22	EPA 8082A	
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071261		C-07
Aroclor 1016	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1221	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1232	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1242	1.06	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	P-10
Aroclor 1248	ND	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	
Aroclor 1254	5.05	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	P-10
Aroclor 1260	0.978	0.324	0.648	mg/kg dry	50	07/29/19 11:58	EPA 8082A	P-10
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 88 %		Limits: 60-125 %	50	07/29/19 11:58	EPA 8082A	
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1016	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1221	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1232	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1242	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1248	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
Aroclor 1254	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9081235		C-07
Aroclor 1260	ND	0.00217	0.00433	mg/kg dry	1	08/22/19 14:58	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 60-125 %</i>	<i>1</i>	<i>08/22/19 14:58</i>	<i>EPA 8082A</i>	

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Anthracene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benz(a)anthracene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Chrysene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Dibenzofuran	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Fluoranthene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Fluorene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Naphthalene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Phenanthrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
Pyrene	ND	0.00549	0.0110	mg/kg dry	1	07/25/19 15:27	EPA 8270D (SIM)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 77 %</i>		<i>Limits: 44-120 %</i>	<i>1</i>	<i>07/25/19 15:27</i>	<i>EPA 8270D (SIM)</i>	
<i>p-Terphenyl-d14 (Surr)</i>		<i>90 %</i>		<i>54-127 %</i>	<i>1</i>	<i>07/25/19 15:27</i>	<i>EPA 8270D (SIM)</i>	

DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Anthracene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benz(a)anthracene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Chrysene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	

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Philip Nerenberg, Lab Director



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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071207		
Dibenzofuran	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Fluoranthene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Fluorene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Naphthalene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Phenanthrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Pyrene	ND	0.00539	0.0108	mg/kg dry	1	07/25/19 15:53	EPA 8270D (SIM)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 72 %		Limits: 44-120 %	1	07/25/19 15:53	EPA 8270D (SIM)	
p-Terphenyl-d14 (Surr)		89 %		54-127 %	1	07/25/19 15:53	EPA 8270D (SIM)	
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Anthracene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benz(a)anthracene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Chrysene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Dibenzofuran	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Fluoranthene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Fluorene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Naphthalene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Phenanthrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Pyrene	ND	0.00538	0.0108	mg/kg dry	1	07/25/19 16:18	EPA 8270D (SIM)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery: 73 %		Limits: 44-120 %	1	07/25/19 16:18	EPA 8270D (SIM)	

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GeoDesign, Inc.

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071207		
<i>Surrogate: p-Terphenyl-d14 (Surr)</i>		<i>Recovery: 89 %</i>	<i>Limits: 54-127 %</i>	<i>1</i>	<i>07/25/19 16:18</i>	<i>EPA 8270D (SIM)</i>		
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071207		
Acenaphthene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Acenaphthylene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Anthracene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Benz(a)anthracene	0.00841	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Benzo(a)pyrene	0.00558	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Benzo(b)fluoranthene	0.00583	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Benzo(k)fluoranthene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Chrysene	0.00636	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Dibenz(a,h)anthracene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Dibenzofuran	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Fluoranthene	0.00890	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
Fluorene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
1-Methylnaphthalene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
2-Methylnaphthalene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Naphthalene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Phenanthrene	ND	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	
Pyrene	0.0104	0.00533	0.0107	mg/kg dry	1	07/25/19 16:44	EPA 8270D (SIM)	J
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 80 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>07/25/19 16:44</i>	<i>EPA 8270D (SIM)</i>		
<i>p-Terphenyl-d14 (Surr)</i>		<i>90 %</i>	<i>54-127 %</i>	<i>1</i>	<i>07/25/19 16:44</i>	<i>EPA 8270D (SIM)</i>		

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08RE1)				Matrix: Soil		Batch: 9080555		
Acenaphthene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Acenaphthylene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Anthracene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benz(a)anthracene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(a)pyrene	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Chrysene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Fluoranthene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Fluorene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1-Methylnaphthalene	ND	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Methylnaphthalene	ND	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Naphthalene	ND	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Phenanthrene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Pyrene	0.0169	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	J
Carbazole	ND	0.0220	0.0440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Dibenzofuran	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Chlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dichlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dimethylphenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dinitrophenol	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Methylphenol	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Nitrophenol	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Nitrophenol	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Phenol	0.0302	0.0294	0.0586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	J
2,3,4,6-Tetrachlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08RE1)				Matrix: Soil		Batch: 9080555		
2,3,5,6-Tetrachlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-ethylhexyl)phthalate	0.250	0.220	0.440	mg/kg dry	10	08/02/19 10:30	EPA 8270D	J
Butyl benzyl phthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Diethylphthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Dimethylphthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Di-n-butylphthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Di-n-octyl phthalate	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachlorobenzene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachlorobutadiene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Hexachloroethane	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Chloronaphthalene	ND	0.0146	0.0294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Aniline	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Chloroaniline	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2-Nitroaniline	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
3-Nitroaniline	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
4-Nitroaniline	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Nitrobenzene	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
2,4-Dinitrotoluene	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(21-22.5) (A9G0676-08RE1)				Matrix: Soil		Batch: 9080555		
2,6-Dinitrotoluene	ND	0.146	0.294	mg/kg dry	10	08/02/19 10:30	EPA 8270D	Q-42
Benzoic acid	ND	1.84	3.66	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Benzyl alcohol	1.07	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Isophorone	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0366	0.0734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	Q-52
3,3'-Dichlorobenzidine	ND	0.294	0.586	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,2-Dinitrobenzene	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,3-Dinitrobenzene	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
1,4-Dinitrobenzene	ND	0.366	0.734	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Pyridine	ND	0.0734	0.146	mg/kg dry	10	08/02/19 10:30	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 30 %		Limits: 37-122 %	10	08/02/19 10:30	EPA 8270D	S-03
2-Fluorobiphenyl (Surr)		41 %		44-115 %	10	08/02/19 10:30	EPA 8270D	S-03
Phenol-d6 (Surr)		32 %		33-122 %	10	08/02/19 10:30	EPA 8270D	S-03
p-Terphenyl-d14 (Surr)		80 %		54-127 %	10	08/02/19 10:30	EPA 8270D	
2-Fluorophenol (Surr)		30 %		35-115 %	10	08/02/19 10:30	EPA 8270D	S-03
2,4,6-Tribromophenol (Surr)		74 %		39-132 %	10	08/02/19 10:30	EPA 8270D	
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Acenaphthene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Acenaphthylene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Anthracene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benz(a)anthracene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(a)pyrene	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(b)fluoranthene	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(k)fluoranthene	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Chrysene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Fluoranthene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Fluorene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1-Methylnaphthalene	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Methylnaphthalene	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Naphthalene	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Phenanthrene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Pyrene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Carbazole	ND	0.00266	0.00532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Dibenzofuran	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Chlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dichlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dimethylphenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dinitrophenol	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Methylphenol	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Nitrophenol	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Nitrophenol	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Phenol	ND	0.00355	0.00709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0266	0.0532	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Butyl benzyl phthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Diethylphthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Dimethylphthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Di-n-butylphthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Di-n-octyl phthalate	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Hexachlorobenzene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Hexachlorobutadiene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Hexachloroethane	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Chloronaphthalene	ND	0.00177	0.00355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Aniline	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Chloroaniline	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2-Nitroaniline	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
3-Nitroaniline	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
4-Nitroaniline	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Nitrobenzene	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0177	0.0355	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzoic acid	ND	0.222	0.443	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Benzyl alcohol	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Isophorone	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00443	0.00887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0355	0.0709	mg/kg dry	1	08/02/19 13:30	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0443	0.0887	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Pyridine	ND	0.00887	0.0177	mg/kg dry	1	08/02/19 13:30	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 44 %		Limits: 37-122 %	1	08/02/19 13:30	EPA 8270D	
2-Fluorobiphenyl (Surr)		53 %		44-115 %	1	08/02/19 13:30	EPA 8270D	
Phenol-d6 (Surr)		51 %		33-122 %	1	08/02/19 13:30	EPA 8270D	
p-Terphenyl-d14 (Surr)		70 %		54-127 %	1	08/02/19 13:30	EPA 8270D	
2-Fluorophenol (Surr)		49 %		35-115 %	1	08/02/19 13:30	EPA 8270D	

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Philip Nerenberg, Lab Director



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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2(25-26.5) (A9G0676-09RE1)				Matrix: Soil		Batch: 9080555		
Surrogate: 2,4,6-Tribromophenol (Surr)		Recovery: 76 %		Limits: 39-132 %	1	08/02/19 13:30		EPA 8270D
DP-10(6-7.5) (A9G0676-35RE2)				Matrix: Soil		Batch: 9071408		
Acenaphthene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Acenaphthylene	0.00810	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Anthracene	0.00541	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benz(a)anthracene	0.0366	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(a)pyrene	0.0695	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(b)fluoranthene	0.0779	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(k)fluoranthene	0.0261	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Benzo(g,h,i)perylene	0.0701	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Chrysene	0.0576	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Dibenz(a,h)anthracene	0.00669	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Fluoranthene	0.117	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Fluorene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Indeno(1,2,3-cd)pyrene	0.0557	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
1-Methylnaphthalene	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Methylnaphthalene	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Naphthalene	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Phenanthrene	0.0471	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Pyrene	0.164	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Carbazole	ND	0.00218	0.00436	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Dibenzofuran	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
4-Chloro-3-methylphenol	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Chlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2,4-Dichlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2,4-Dimethylphenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2,4-Dinitrophenol	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
4,6-Dinitro-2-methylphenol	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Methylphenol	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
3+4-Methylphenol(s)	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02		EPA 8270D
2-Nitrophenol	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
4-Nitrophenol	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D
Pentachlorophenol (PCP)	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02		EPA 8270D

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35RE2)				Matrix: Soil		Batch: 9071408		
Phenol	ND	0.00291	0.00581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0218	0.0436	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Butyl benzyl phthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Diethylphthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Dimethylphthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Di-n-butylphthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Di-n-octyl phthalate	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachlorobenzene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachlorobutadiene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Hexachloroethane	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2-Chloronaphthalene	ND	0.00145	0.00291	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
Aniline	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Chloroaniline	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
2-Nitroaniline	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
3-Nitroaniline	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	
4-Nitroaniline	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
DP-10(6-7.5) (A9G0676-35RE2)				Matrix: Soil		Batch: 9071408			
Nitrobenzene	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
2,4-Dinitrotoluene	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
2,6-Dinitrotoluene	ND	0.0145	0.0291	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Benzoic acid	ND	0.182	0.363	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Benzyl alcohol	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Isophorone	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Azobenzene (1,2-DPH)	ND	0.00363	0.00727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Bis(2-Ethylhexyl) adipate	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
3,3'-Dichlorobenzidine	ND	0.0291	0.0581	mg/kg dry	1	07/31/19 20:02	EPA 8270D	Q-52	
1,2-Dinitrobenzene	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
1,3-Dinitrobenzene	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
1,4-Dinitrobenzene	ND	0.0363	0.0727	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Pyridine	ND	0.00727	0.0145	mg/kg dry	1	07/31/19 20:02	EPA 8270D		
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:		60 %	Limits:	37-122 %	1	07/31/19 20:02	EPA 8270D
2-Fluorobiphenyl (Surr)				76 %		44-115 %	1	07/31/19 20:02	EPA 8270D
Phenol-d6 (Surr)				60 %		33-122 %	1	07/31/19 20:02	EPA 8270D
p-Terphenyl-d14 (Surr)				91 %		54-127 %	1	07/31/19 20:02	EPA 8270D
2-Fluorophenol (Surr)				62 %		35-115 %	1	07/31/19 20:02	EPA 8270D
2,4,6-Tribromophenol (Surr)				86 %		39-132 %	1	07/31/19 20:02	EPA 8270D
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071408			
Acenaphthene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Acenaphthylene	0.244	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Anthracene	0.290	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benz(a)anthracene	1.65	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benzo(a)pyrene	2.87	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benzo(b)fluoranthene	4.26	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Benzo(k)fluoranthene	1.35	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D	M-05	
Benzo(g,h,i)perylene	2.32	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Chrysene	2.30	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Dibenz(a,h)anthracene	0.613	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Fluoranthene	2.86	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Fluorene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		
Indeno(1,2,3-cd)pyrene	2.36	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D		

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071408		
1-Methylnaphthalene	ND	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Methylnaphthalene	ND	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Naphthalene	ND	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Phenanthrene	0.967	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Pyrene	3.15	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Carbazole	0.0887	0.0868	0.174	mg/kg dry	40	07/30/19 23:27	EPA 8270D	J
Dibenzofuran	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Chlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dichlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dimethylphenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dinitrophenol	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Methylphenol	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
3+4-Methylphenol(s)	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Nitrophenol	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Nitrophenol	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Pentachlorophenol (PCP)	0.598	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	J
Phenol	0.898	0.116	0.231	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.868	1.74	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Butyl benzyl phthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Diethylphthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Dimethylphthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Di-n-butylphthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Di-n-octyl phthalate	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
N-Nitrosodimethylamine	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071408		
Bis(2-Chloroethyl) ether	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachlorobenzene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachlorobutadiene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Hexachloroethane	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Chloronaphthalene	ND	0.0578	0.116	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,2-Dichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,3-Dichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,4-Dichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Aniline	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Chloroaniline	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2-Nitroaniline	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
3-Nitroaniline	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
4-Nitroaniline	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Nitrobenzene	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,4-Dinitrotoluene	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
2,6-Dinitrotoluene	ND	0.578	1.16	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Benzoic acid	ND	7.25	14.5	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Benzyl alcohol	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Isophorone	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.145	0.290	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
3,3'-Dichlorobenzidine	ND	1.16	2.31	mg/kg dry	40	07/30/19 23:27	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,3-Dinitrobenzene	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
1,4-Dinitrobenzene	ND	1.45	2.90	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
Pyridine	ND	0.290	0.578	mg/kg dry	40	07/30/19 23:27	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 62 %</i>		<i>Limits: 37-122 %</i>	40	07/30/19 23:27	EPA 8270D	S-05
<i>2-Fluorobiphenyl (Surr)</i>		<i>87 %</i>		<i>44-115 %</i>	40	07/30/19 23:27	EPA 8270D	S-05

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(6-7.5) (A9G0676-38)		Matrix: Soil			Batch: 9071408			
<i>Surrogate: Phenol-d6 (Surr)</i>		<i>Recovery:</i>	70 %	<i>Limits:</i>	33-122 %	40	07/30/19 23:27	EPA 8270D S-05
<i>p-Terphenyl-d14 (Surr)</i>			96 %		54-127 %	40	07/30/19 23:27	EPA 8270D S-05
<i>2-Fluorophenol (Surr)</i>			52 %		35-115 %	40	07/30/19 23:27	EPA 8270D S-05
<i>2,4,6-Tribromophenol (Surr)</i>			115 %		39-132 %	40	07/30/19 23:27	EPA 8270D S-05
DP-11(10-11.5) (A9G0676-39RE1)		Matrix: Soil			Batch: 9080555			
Acenaphthene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Acenaphthylene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Anthracene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benz(a)anthracene	0.00291	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzo(a)pyrene	0.00284	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	J
Benzo(b)fluoranthene	0.00301	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	J
Benzo(k)fluoranthene	ND	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzo(g,h,i)perylene	0.00355	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Chrysene	0.00279	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	J
Dibenz(a,h)anthracene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Fluoranthene	0.00611	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Fluorene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Indeno(1,2,3-cd)pyrene	0.00287	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1-Methylnaphthalene	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Methylnaphthalene	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Naphthalene	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Phenanthrene	0.00407	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Pyrene	0.00766	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Carbazole	ND	0.00212	0.00424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Dibenzofuran	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Chlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dichlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dimethylphenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dinitrophenol	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Methylphenol	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080555		
2-Nitrophenol	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Nitrophenol	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Phenol	ND	0.00283	0.00565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0212	0.0424	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Butyl benzyl phthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Diethylphthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Dimethylphthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Di-n-butylphthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Di-n-octyl phthalate	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachlorobenzene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachlorobutadiene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Hexachloroethane	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2-Chloronaphthalene	ND	0.00141	0.00283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Aniline	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Chloroaniline	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	

Apex Laboratories

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39RE1)				Matrix: Soil		Batch: 9080555		
2-Nitroaniline	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
3-Nitroaniline	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
4-Nitroaniline	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Nitrobenzene	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0141	0.0283	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzoic acid	ND	0.177	0.353	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Benzyl alcohol	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Isophorone	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00353	0.00707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0283	0.0565	mg/kg dry	1	08/02/19 14:06	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0353	0.0707	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Pyridine	ND	0.00707	0.0141	mg/kg dry	1	08/02/19 14:06	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 65 %		Limits: 37-122 %	1	08/02/19 14:06	EPA 8270D	
2-Fluorobiphenyl (Surr)		70 %		44-115 %	1	08/02/19 14:06	EPA 8270D	
Phenol-d6 (Surr)		68 %		33-122 %	1	08/02/19 14:06	EPA 8270D	
p-Terphenyl-d14 (Surr)		82 %		54-127 %	1	08/02/19 14:06	EPA 8270D	
2-Fluorophenol (Surr)		69 %		35-115 %	1	08/02/19 14:06	EPA 8270D	
2,4,6-Tribromophenol (Surr)		92 %		39-132 %	1	08/02/19 14:06	EPA 8270D	
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
Acenaphthene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Acenaphthylene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Anthracene	0.366	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	J
Benz(a)anthracene	2.81	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzo(a)pyrene	5.59	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzo(b)fluoranthene	8.12	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzo(k)fluoranthene	2.63	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	M-05
Benzo(g,h,i)perylene	6.99	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Chrysene	3.55	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Dibenz(a,h)anthracene	1.52	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
Fluoranthene	3.05	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Fluorene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Indeno(1,2,3-cd)pyrene	6.32	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1-Methylnaphthalene	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Methylnaphthalene	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Naphthalene	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Phenanthrene	0.650	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	J
Pyrene	4.29	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Carbazole	ND	0.523	1.05	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Dibenzofuran	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Chloro-3-methylphenol	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Chlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dichlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dimethylphenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dinitrophenol	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Methylphenol	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
3+4-Methylphenol(s)	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Nitrophenol	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Nitrophenol	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Pentachlorophenol (PCP)	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Phenol	ND	0.698	1.39	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4,5-Trichlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4,6-Trichlorophenol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	5.23	10.5	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Butyl benzyl phthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Diethylphthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Dimethylphthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Di-n-butylphthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Di-n-octyl phthalate	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
N-Nitrosodimethylamine	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
N-Nitroso-di-n-propylamine	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachlorobenzene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachlorobutadiene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachlorocyclopentadiene	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Hexachloroethane	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Chloronaphthalene	ND	0.348	0.698	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,2-Dichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,3-Dichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,4-Dichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Aniline	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Chloroaniline	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2-Nitroaniline	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
3-Nitroaniline	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
4-Nitroaniline	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Nitrobenzene	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,4-Dinitrotoluene	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
2,6-Dinitrotoluene	ND	3.48	6.98	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzoic acid	ND	43.7	87.1	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Benzyl alcohol	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Isophorone	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.871	1.74	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
3,3'-Dichlorobenzidine	ND	6.98	13.9	mg/kg dry	100	07/31/19 00:03	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,3-Dinitrobenzene	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
1,4-Dinitrobenzene	ND	8.71	17.4	mg/kg dry	100	07/31/19 00:03	EPA 8270D	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071408		
Pyridine	ND	1.74	3.48	mg/kg dry	100	07/31/19 00:03	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>								
			Recovery: 62 %	Limits: 37-122 %	100	07/31/19 00:03	EPA 8270D	S-05
<i>2-Fluorobiphenyl (Surr)</i>								
			98 %	44-115 %	100	07/31/19 00:03	EPA 8270D	S-05
<i>Phenol-d6 (Surr)</i>								
			50 %	33-122 %	100	07/31/19 00:03	EPA 8270D	S-05
<i>p-Terphenyl-d14 (Surr)</i>								
			108 %	54-127 %	100	07/31/19 00:03	EPA 8270D	S-05
<i>2-Fluorophenol (Surr)</i>								
			57 %	35-115 %	100	07/31/19 00:03	EPA 8270D	S-05
<i>2,4,6-Tribromophenol (Surr)</i>								
			230 %	39-132 %	100	07/31/19 00:03	EPA 8270D	S-05
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080555		
Acenaphthene	0.00249	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	J
Acenaphthylene	0.00359	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Anthracene	0.00447	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benz(a)anthracene	0.0155	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benzo(a)pyrene	0.0124	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benzo(b)fluoranthene	0.0130	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	M-05
Benzo(k)fluoranthene	0.00477	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	M-05
Benzo(g,h,i)perylene	0.00886	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Chrysene	0.0167	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Dibenz(a,h)anthracene	0.00167	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	J
Fluoranthene	0.0274	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Fluorene	0.00194	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	J
Indeno(1,2,3-cd)pyrene	0.00859	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1-Methylnaphthalene	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Methylnaphthalene	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Naphthalene	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Phenanthrene	0.0200	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Pyrene	0.0375	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Carbazole	ND	0.00207	0.00413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Dibenzofuran	ND	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Chlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dichlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dimethylphenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dinitrophenol	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080555		
4,6-Dinitro-2-methylphenol	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Methylphenol	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Nitrophenol	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Nitrophenol	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Phenol	ND	0.00276	0.00551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0207	0.0413	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Butyl benzyl phthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Diethylphthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Dimethylphthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Di-n-butylphthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Di-n-octyl phthalate	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachlorobenzene	ND	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachlorobutadiene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Hexachloroethane	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Chloronaphthalene	ND	0.00137	0.00276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,4-Dichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43RE1)				Matrix: Soil		Batch: 9080555		
4-Chlorophenyl phenyl ether	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Aniline	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Chloroaniline	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2-Nitroaniline	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
3-Nitroaniline	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
4-Nitroaniline	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Nitrobenzene	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0137	0.0276	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benzoic acid	ND	0.172	0.344	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Benzyl alcohol	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Isophorone	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00344	0.00689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0276	0.0551	mg/kg dry	1	08/02/19 14:42	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0344	0.0689	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Pyridine	ND	0.00689	0.0137	mg/kg dry	1	08/02/19 14:42	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 58 %		Limits: 37-122 %	1	08/02/19 14:42	EPA 8270D	
2-Fluorobiphenyl (Surr)		64 %		44-115 %	1	08/02/19 14:42	EPA 8270D	
Phenol-d6 (Surr)		64 %		33-122 %	1	08/02/19 14:42	EPA 8270D	
p-Terphenyl-d14 (Surr)		81 %		54-127 %	1	08/02/19 14:42	EPA 8270D	
2-Fluorophenol (Surr)		62 %		35-115 %	1	08/02/19 14:42	EPA 8270D	
2,4,6-Tribromophenol (Surr)		89 %		39-132 %	1	08/02/19 14:42	EPA 8270D	

DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
Acenaphthene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Acenaphthylene	0.355	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Anthracene	0.324	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	J
Benz(a)anthracene	2.44	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Benzo(a)pyrene	6.23	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Benzo(b)fluoranthene	8.23	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D	M-05
Benzo(k)fluoranthene	2.70	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D	

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
Benzo(g,h,i)perylene	6.75	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Chrysene	3.04	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Dibenz(a,h)anthracene	1.52	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Fluoranthene	2.49	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Fluorene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Indeno(1,2,3-cd)pyrene	6.33	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1-Methylnaphthalene	ND	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Methylnaphthalene	ND	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Naphthalene	ND	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Phenanthrene	0.695	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Pyrene	4.02	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Carbazole	ND	0.261	0.521	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Dibenzofuran	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Chloro-3-methylphenol	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Chlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dichlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dimethylphenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dinitrophenol	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Methylphenol	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
3+4-Methylphenol(s)	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Nitrophenol	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Nitrophenol	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Pentachlorophenol (PCP)	2.01	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	J
Phenol	0.767	0.348	0.695	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	2.61	5.21	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Butyl benzyl phthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Diethylphthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Dimethylphthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	

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Philip Nerenberg, Lab Director



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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
Di-n-butylphthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Di-n-octyl phthalate	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
N-Nitrosodimethylamine	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachlorobenzene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachlorobutadiene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Hexachloroethane	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Chloronaphthalene	ND	0.173	0.348	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,2-Dichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,3-Dichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,4-Dichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Aniline	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Chloroaniline	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2-Nitroaniline	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
3-Nitroaniline	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
4-Nitroaniline	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Nitrobenzene	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,4-Dinitrotoluene	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
2,6-Dinitrotoluene	ND	1.73	3.48	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Benzoic acid	ND	21.8	43.4	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Benzyl alcohol	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Isophorone	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.434	0.869	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
3,3'-Dichlorobenzidine	ND	3.48	6.95	mg/kg dry	100	07/31/19 00:40	EPA 8270D	Q-52

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071408		
1,2-Dinitrobenzene	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,3-Dinitrobenzene	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
1,4-Dinitrobenzene	ND	4.34	8.69	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
Pyridine	ND	0.869	1.73	mg/kg dry	100	07/31/19 00:40	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	67 %	<i>Limits:</i>	37-122 %	100	07/31/19 00:40	EPA 8270D S-05
<i>2-Fluorobiphenyl (Surr)</i>			87 %		44-115 %	100	07/31/19 00:40	EPA 8270D S-05
<i>Phenol-d6 (Surr)</i>			54 %		33-122 %	100	07/31/19 00:40	EPA 8270D S-05
<i>p-Terphenyl-d14 (Surr)</i>			95 %		54-127 %	100	07/31/19 00:40	EPA 8270D S-05
<i>2-Fluorophenol (Surr)</i>			59 %		35-115 %	100	07/31/19 00:40	EPA 8270D S-05
<i>2,4,6-Tribromophenol (Surr)</i>			160 %		39-132 %	100	07/31/19 00:40	EPA 8270D S-05
DP-13(10-11.5) (A9G0676-47RE2)				Matrix: Soil		Batch: 9080555		
Acenaphthene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Acenaphthylene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Anthracene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benz(a)anthracene	0.00362	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzo(a)pyrene	0.00264	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Benzo(b)fluoranthene	0.00275	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Benzo(k)fluoranthene	ND	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzo(g,h,i)perylene	0.00205	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Chrysene	0.00345	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Fluoranthene	0.00467	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Fluorene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Indeno(1,2,3-cd)pyrene	0.00200	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
1-Methylnaphthalene	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Methylnaphthalene	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Naphthalene	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Phenanthrene	0.00254	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	J
Pyrene	0.00640	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Carbazole	ND	0.00210	0.00420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Dibenzofuran	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Chlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47RE2)				Matrix: Soil		Batch: 9080555		
2,4-Dichlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4-Dimethylphenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4-Dinitrophenol	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Methylphenol	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
3+4-Methylphenol(s)	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Nitrophenol	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Nitrophenol	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Phenol	ND	0.00280	0.00559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.0210	0.0420	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Butyl benzyl phthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Diethylphthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Dimethylphthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Di-n-butylphthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Di-n-octyl phthalate	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
N-Nitrosodimethylamine	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachlorobenzene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachlorobutadiene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Hexachloroethane	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Chloronaphthalene	ND	0.00140	0.00280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,2-Dichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,3-Dichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47RE2)				Matrix: Soil		Batch: 9080555		
1,4-Dichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Aniline	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Chloroaniline	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2-Nitroaniline	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
3-Nitroaniline	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
4-Nitroaniline	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Nitrobenzene	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0140	0.0280	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzoic acid	ND	0.175	0.350	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Benzyl alcohol	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Isophorone	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.00350	0.00700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.0280	0.0559	mg/kg dry	1	08/02/19 12:18	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,3-Dinitrobenzene	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
1,4-Dinitrobenzene	ND	0.0350	0.0700	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
Pyridine	ND	0.00700	0.0140	mg/kg dry	1	08/02/19 12:18	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	73 %	<i>Limits:</i>	37-122 %	1	08/02/19 12:18	EPA 8270D
<i>2-Fluorobiphenyl (Surr)</i>			78 %		44-115 %	1	08/02/19 12:18	EPA 8270D
<i>Phenol-d6 (Surr)</i>			78 %		33-122 %	1	08/02/19 12:18	EPA 8270D
<i>p-Terphenyl-d14 (Surr)</i>			86 %		54-127 %	1	08/02/19 12:18	EPA 8270D
<i>2-Fluorophenol (Surr)</i>			77 %		35-115 %	1	08/02/19 12:18	EPA 8270D
<i>2,4,6-Tribromophenol (Surr)</i>			102 %		39-132 %	1	08/02/19 12:18	EPA 8270D

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GeoDesign, Inc.

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02) Matrix: Soil								
Batch: 9071299								
Arsenic	2.48	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Barium	102	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Cadmium	0.359	0.113	0.226	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Chromium	11.0	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Lead	2.50	0.113	0.226	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Mercury	ND	0.0452	0.0904	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Selenium	ND	0.565	1.13	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
Silver	ND	0.113	0.226	mg/kg dry	10	07/30/19 18:12	EPA 6020A	
DP-2(11-12.5) (A9G0676-06) Matrix: Soil								
Batch: 9071299								
Arsenic	2.56	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Barium	61.4	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	Q-42
Cadmium	0.357	0.110	0.221	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Chromium	9.23	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Lead	2.17	0.110	0.221	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Mercury	ND	0.0441	0.0883	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Selenium	ND	0.552	1.10	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
Silver	ND	0.110	0.221	mg/kg dry	10	07/30/19 18:17	EPA 6020A	
DP-3(10-11.5) (A9G0676-10) Matrix: Soil								
Batch: 9071299								
Arsenic	2.20	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Barium	61.4	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Cadmium	0.297	0.112	0.224	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Chromium	8.36	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Lead	2.09	0.112	0.224	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Mercury	0.0639	0.0448	0.0895	mg/kg dry	10	07/30/19 18:30	EPA 6020A	J
Selenium	ND	0.559	1.12	mg/kg dry	10	07/30/19 18:30	EPA 6020A	
Silver	ND	0.112	0.224	mg/kg dry	10	07/30/19 18:30	EPA 6020A	

DP-4(11.5-13) (A9G0676-13)

Matrix: Soil

Batch: 9071299

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-4(11.5-13) (A9G0676-13) Matrix: Soil								
Arsenic	2.55	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Barium	59.9	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Cadmium	0.381	0.109	0.218	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Chromium	9.53	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Lead	2.41	0.109	0.218	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Mercury	ND	0.0435	0.0871	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Selenium	ND	0.544	1.09	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
Silver	ND	0.109	0.218	mg/kg dry	10	07/30/19 18:35	EPA 6020A	
DP-5(10-11.5) (A9G0676-16) Matrix: Soil								
Batch: 9071299								
Arsenic	2.39	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Barium	67.4	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Cadmium	0.383	0.116	0.233	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Chromium	10.4	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Lead	2.62	0.116	0.233	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Mercury	ND	0.0465	0.0930	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Selenium	ND	0.581	1.16	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
Silver	ND	0.116	0.233	mg/kg dry	10	07/30/19 18:49	EPA 6020A	
DP-10(6-7.5) (A9G0676-35) Matrix: Soil								
Batch: 9071299								
Antimony	ND	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Arsenic	2.12	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Barium	75.7	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Beryllium	0.272	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Cadmium	0.362	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Chromium	11.5	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Copper	14.1	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Lead	3.42	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Mercury	ND	0.0495	0.0991	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Nickel	17.0	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Selenium	ND	0.619	1.24	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Silver	ND	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	

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Philip Nerenberg, Lab Director

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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35) Matrix: Soil								
Thallium	ND	0.124	0.248	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
Zinc	39.3	2.48	4.95	mg/kg dry	10	07/30/19 18:53	EPA 6020A	
DP-11(6-7.5) (A9G0676-38) Matrix: Soil								
Batch: 9071299								
Antimony	6.74	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Arsenic	51.3	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Beryllium	ND	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Cadmium	1.05	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Chromium	201	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Lead	480	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Nickel	10.3	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Selenium	ND	0.554	1.11	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Silver	0.315	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Thallium	ND	0.111	0.221	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
Zinc	1650	2.21	4.43	mg/kg dry	10	07/30/19 18:58	EPA 6020A	
DP-11(6-7.5) (A9G0676-38RE1) Matrix: Soil								
Batch: 9071299								
Copper	2410	5.54	11.1	mg/kg dry	100	07/31/19 17:09	EPA 6020A	
Mercury	14.9	0.443	0.886	mg/kg dry	100	07/31/19 17:09	EPA 6020A	
DP-11(10-11.5) (A9G0676-39) Matrix: Soil								
Batch: 9081214								
Antimony	ND	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Arsenic	1.84	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Beryllium	0.280	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Cadmium	ND	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Chromium	6.49	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Copper	10.7	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Lead	1.96	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Mercury	ND	0.0461	0.0922	mg/kg dry	10	08/22/19 19:47	EPA 6020A	H-06
Nickel	12.0	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Selenium	ND	0.576	1.15	mg/kg dry	10	08/22/19 19:47	EPA 6020A	

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503-718-2323
EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-11(10-11.5) (A9G0676-39)								
Matrix: Soil								
Silver	ND	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Thallium	ND	0.115	0.230	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
Zinc	26.3	2.30	4.61	mg/kg dry	10	08/22/19 19:47	EPA 6020A	
DP-12(5-6.5) (A9G0676-42)								
Matrix: Soil								
Batch: 9071299								
Arsenic	172	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Beryllium	ND	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Cadmium	1.81	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Chromium	212	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Nickel	24.6	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Selenium	ND	0.546	1.09	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
Silver	0.215	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	J
Thallium	ND	0.109	0.218	mg/kg dry	10	07/30/19 19:03	EPA 6020A	
DP-12(5-6.5) (A9G0676-42RE1)								
Matrix: Soil								
Batch: 9071299								
Antimony	102	10.9	21.8	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Copper	4240	10.9	21.8	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Lead	1110	2.18	4.37	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Mercury	36.0	0.874	1.75	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
Zinc	2790	43.7	87.4	mg/kg dry	200	07/31/19 17:13	EPA 6020A	
DP-12(10-11.5) (A9G0676-43)								
Matrix: Soil								
Batch: 9081214								
Antimony	ND	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Arsenic	2.31	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Beryllium	0.262	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Cadmium	ND	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Chromium	9.15	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Copper	12.2	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Lead	2.41	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Mercury	ND	0.0447	0.0894	mg/kg dry	10	08/22/19 19:51	EPA 6020A	H-06
Nickel	15.6	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****ANALYTICAL SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-12(10-11.5) (A9G0676-43)								
Matrix: Soil								
Selenium	ND	0.559	1.12	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Silver	ND	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Thallium	ND	0.112	0.223	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
Zinc	33.3	2.23	4.47	mg/kg dry	10	08/22/19 19:51	EPA 6020A	
DP-13(5-6.5) (A9G0676-46)								
Matrix: Soil								
Batch: 9071299								
Antimony	2.26	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Arsenic	55.1	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Beryllium	0.243	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	J
Cadmium	0.902	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Chromium	114	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Lead	475	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Nickel	23.0	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Selenium	ND	0.643	1.29	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Silver	0.136	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	J
Thallium	ND	0.129	0.257	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
Zinc	936	2.57	5.14	mg/kg dry	10	07/30/19 19:16	EPA 6020A	
DP-13(5-6.5) (A9G0676-46RE1)								
Matrix: Soil								
Batch: 9071299								
Copper	2320	6.43	12.9	mg/kg dry	100	07/31/19 17:18	EPA 6020A	
Mercury	19.7	0.514	1.03	mg/kg dry	100	07/31/19 17:18	EPA 6020A	
DP-13(10-11.5) (A9G0676-47)								
Matrix: Soil								
Batch: 9081214								
Antimony	ND	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Arsenic	1.87	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Beryllium	0.233	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Cadmium	ND	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Chromium	7.70	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Copper	11.1	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Lead	2.11	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Mercury	ND	0.0463	0.0927	mg/kg dry	10	08/22/19 19:55	EPA 6020A	H-06

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil				
Nickel	13.3	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Selenium	ND	0.579	1.16	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Silver	ND	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Thallium	ND	0.116	0.232	mg/kg dry	10	08/22/19 19:55	EPA 6020A	
Zinc	29.3	2.32	4.63	mg/kg dry	10	08/22/19 19:55	EPA 6020A	

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

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ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1(11-12.5) (A9G0676-02)				Matrix: Soil		Batch: 9071168		
% Solids	89.8	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-2(11-12.5) (A9G0676-06)				Matrix: Soil		Batch: 9071168		
% Solids	91.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-2(21-22.5) (A9G0676-08)				Matrix: Soil		Batch: 9071168		
% Solids	89.6	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-2(25-26.5) (A9G0676-09)				Matrix: Soil		Batch: 9080517		
% Solids	73.9	1.00	1.00	% by Weight	1	08/02/19 08:43	EPA 8000C	
DP-3(10-11.5) (A9G0676-10)				Matrix: Soil		Batch: 9071168		
% Solids	92.3	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-4(11.5-13) (A9G0676-13)				Matrix: Soil		Batch: 9071168		
% Solids	90.6	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-5(10-11.5) (A9G0676-16)				Matrix: Soil		Batch: 9071168		
% Solids	92.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-5(15-16.5) (A9G0676-17)				Matrix: Soil		Batch: 9071168		
% Solids	88.4	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-6(12-13.5) (A9G0676-20)				Matrix: Soil		Batch: 9071168		
% Solids	92.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-7(11.5-13) (A9G0676-24)				Matrix: Soil		Batch: 9071168		
% Solids	93.2	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-8(11.5-13) (A9G0676-28)				Matrix: Soil		Batch: 9071168		
% Solids	92.4	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-9(11-12.5) (A9G0676-32)				Matrix: Soil		Batch: 9071168		
% Solids	91.2	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071168		

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Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-10(6-7.5) (A9G0676-35)				Matrix: Soil		Batch: 9071168		
% Solids	88.0	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-10(16.5-18) (A9G0676-37)				Matrix: Soil		Batch: 9080572		
% Solids	89.1	1.00	1.00	% by Weight	1	08/05/19 13:46	EPA 8000C	
DP-11(6-7.5) (A9G0676-38)				Matrix: Soil		Batch: 9071168		
% Solids	90.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-11(10-11.5) (A9G0676-39)				Matrix: Soil		Batch: 9080572		
% Solids	92.7	1.00	1.00	% by Weight	1	08/05/19 13:46	EPA 8000C	
DP-11(16.5-18) (A9G0676-40)				Matrix: Soil		Batch: 9080658		
% Solids	89.4	1.00	1.00	% by Weight	1	08/07/19 08:36	EPA 8000C	
DP-12(5-6.5) (A9G0676-42)				Matrix: Soil		Batch: 9071168		
% Solids	91.5	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-12(10-11.5) (A9G0676-43)				Matrix: Soil		Batch: 9080640		
% Solids	91.5	1.00	1.00	% by Weight	1	08/06/19 08:28	EPA 8000C	
DP-12(16.5-18) (A9G0676-44)				Matrix: Soil		Batch: 9080572		
% Solids	92.0	1.00	1.00	% by Weight	1	08/05/19 13:46	EPA 8000C	
DP-13(5-6.5) (A9G0676-46)				Matrix: Soil		Batch: 9071168		
% Solids	76.6	1.00	1.00	% by Weight	1	07/24/19 08:52	EPA 8000C	
DP-13(10-11.5) (A9G0676-47)				Matrix: Soil		Batch: 9080517		
% Solids	91.7	1.00	1.00	% by Weight	1	08/02/19 08:43	EPA 8000C	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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 9071293 - EPA 3546 (Fuels)						Soil						
Blank (9071293-BLK1)						Prepared: 07/25/19 12:58 Analyzed: 07/25/19 22:16						
NWTPH-Dx												
Diesel	ND	8.33	16.7	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	16.7	33.3	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	16.7	33.3	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
LCS (9071293-BS1)						Prepared: 07/25/19 12:58 Analyzed: 07/25/19 22:38						
NWTPH-Dx												
Diesel	111	10.0	20.0	mg/kg wet	1	125	---	89	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9071293-DUP1)						Prepared: 07/25/19 12:58 Analyzed: 07/25/19 23:22						
QC Source Sample: Non-SDG (A9G0672-02)												
Diesel	10.9	9.91	19.8	mg/kg dry	1	---	12.2	---	---	11	30%	J
Oil	ND	19.8	39.6	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	19.8	39.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9071293-DUP2)						Prepared: 07/25/19 12:58 Analyzed: 07/26/19 10:30						
QC Source Sample: Non-SDG (A9G0766-02)												
Diesel	ND	10.4	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	20.8	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	20.8	41.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 101 %		Limits: 50-150 %		Dilution: 1x						
Batch 9080541 - EPA 3546 (Fuels)						Soil						
Blank (9080541-BLK1)						Prepared: 08/01/19 12:56 Analyzed: 08/01/19 20:33						
NWTPH-Dx												
Diesel	ND	8.33	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	16.7	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 110 %		Limits: 50-150 %		Dilution: 1x						

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080541 - EPA 3546 (Fuels)						Soil						
LCS (9080541-BS1)			Prepared: 08/01/19 12:56 Analyzed: 08/01/19 20:54									
<u>NWTPH-Dx</u>												
Diesel	106	10.0	25.0	mg/kg wet	1	125	---	85	76-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 113 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9080541-DUP1)			Prepared: 08/01/19 12:56 Analyzed: 08/01/19 21:39									
<u>QC Source Sample: DP-2(25-26.5) (A9G0676-09)</u>												
<u>NWTPH-Dx</u>												
Diesel	ND	11.7	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	23.5	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 108 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (9080541-DUP2)			Prepared: 08/01/19 17:48 Analyzed: 08/02/19 00:58									
<u>QC Source Sample: Non-SDG (A9H0030-02)</u>												
Diesel	ND	10.3	20.5	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	20.5	41.1	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)				Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:38								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		91 %		50-150 %		"						
LCS (9071206-BS2)				Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:10								
NWTPH-Gx (MS)												
Gasoline Range Organics	23.2	2.50	5.00	mg/kg wet	50	25.0	---	93	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		93 %		50-150 %		"						
Duplicate (9071206-DUP1)				Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44								
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	3.10	6.20	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 85 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		83 %		50-150 %		"						
Duplicate (9071206-DUP2)				Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51								
QC Source Sample: DP-7(11.5-13) (A9G0676-24)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	2.54	5.08	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		89 %		50-150 %		"						

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00 Analyzed: 07/24/19 14:51									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		89 %		50-150 %		"						
LCS (9071232-BS1)			Prepared: 07/24/19 12:00 Analyzed: 07/24/19 13:28									
NWTPH-Gx (MS)												
Gasoline Range Organics	24.0	2.50	5.00	mg/kg wet	50	25.0	---	96	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						
Duplicate (9071232-DUP1)			Prepared: 07/19/19 10:35 Analyzed: 07/24/19 16:40									
QC Source Sample: DP-10(6-7.5) (A9G0676-35)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	3.24	6.47	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 85 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		83 %		50-150 %		"						

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****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 9080584 - EPA 5035A						Soil							
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00 Analyzed: 08/02/19 13:12										
NWTPH-Gx (MS)													
Gasoline Range Organics	ND	1.67	3.33	mg/kg wet	50	---	---	---	---	---	---		
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 105 %		Limits: 50-150 %		Dilution: 1x							
1,4-Difluorobenzene (Sur)		105 %		50-150 %		"							
LCS (9080584-BS2)			Prepared: 08/02/19 11:00 Analyzed: 08/02/19 12:45										
NWTPH-Gx (MS)													
Gasoline Range Organics	26.2	2.50	5.00	mg/kg wet	50	25.0	---	105	80-120%	---	---		
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x							
1,4-Difluorobenzene (Sur)		107 %		50-150 %		"							
Duplicate (9080584-DUP1)			Prepared: 07/31/19 18:15 Analyzed: 08/02/19 17:29									V-15	
QC Source Sample: Non-SDG (A9G0983-05RE1)													
Gasoline Range Organics	4750	94.0	188	mg/kg wet	2000	---	4560	---	---	4	30%		
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 192 %		Limits: 50-150 %		Dilution: 1x							S-02
1,4-Difluorobenzene (Sur)		121 %		50-150 %		"							

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)			Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:38									
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)						Prepared: 07/23/19 21:30 Analyzed: 07/23/19 22:38						
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 89 % Limits: 80-120 % Dilution: 1x												

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Blank (9071206-BLK1)			Prepared: 07/23/19 21:30		Analyzed: 07/23/19 22:38							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
LCS (9071206-BS1)			Prepared: 07/23/19 21:30		Analyzed: 07/23/19 21:43							
5035A/8260C												
Acetone	2.00	0.500	1.00	mg/kg wet	50	2.00	---	100	80-120%	---	---	
Acrylonitrile	0.894	0.0500	0.100	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Benzene	0.870	0.00500	0.0100	mg/kg wet	50	1.00	---	87	80-120%	---	---	
Bromobenzene	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Bromochloromethane	0.929	0.0250	0.0500	mg/kg wet	50	1.00	---	93	80-120%	---	---	
Bromodichloromethane	1.15	0.0250	0.0500	mg/kg wet	50	1.00	---	115	80-120%	---	---	
Bromoform	1.40	0.0500	0.100	mg/kg wet	50	1.00	---	140	80-120%	---	---	Q-56
Bromomethane	1.20	0.500	0.500	mg/kg wet	50	1.00	---	120	80-120%	---	---	
2-Butanone (MEK)	1.84	0.250	0.500	mg/kg wet	50	2.00	---	92	80-120%	---	---	
n-Butylbenzene	1.05	0.0250	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
sec-Butylbenzene	0.994	0.0250	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
tert-Butylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Carbon disulfide	0.889	0.250	0.500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Carbon tetrachloride	1.19	0.0250	0.0500	mg/kg wet	50	1.00	---	119	80-120%	---	---	
Chlorobenzene	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Chloroethane	1.04	0.250	0.500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloroform	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloromethane	0.820	0.125	0.250	mg/kg wet	50	1.00	---	82	80-120%	---	---	
2-Chlorotoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
4-Chlorotoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dibromochloromethane	1.25	0.0500	0.100	mg/kg wet	50	1.00	---	125	80-120%	---	---	Q-56
1,2-Dibromo-3-chloropropane	1.03	0.125	0.250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.10	0.0250	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
Dibromomethane	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,4-Dichlorobenzene	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dichlorodifluoromethane	1.06	0.0500	0.100	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,1-Dichloroethane	0.943	0.0125	0.0250	mg/kg wet	50	1.00	---	94	80-120%	---	---	

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GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
LCS (9071206-BS1)						Prepared: 07/23/19 21:30 Analyzed: 07/23/19 21:43						
1,2-Dichloroethane (EDC)	1.11	0.0125	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
1,1-Dichloroethene	0.969	0.0125	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
cis-1,2-Dichloroethene	0.999	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
trans-1,2-Dichloroethene	0.990	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,2-Dichloropropane	0.894	0.0125	0.0250	mg/kg wet	50	1.00	---	89	80-120%	---	---	
1,3-Dichloropropane	1.10	0.0250	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
2,2-Dichloropropane	1.19	0.0250	0.0500	mg/kg wet	50	1.00	---	119	80-120%	---	---	
1,1-Dichloropropene	0.977	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
cis-1,3-Dichloropropene	1.09	0.0250	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
trans-1,3-Dichloropropene	1.17	0.0250	0.0500	mg/kg wet	50	1.00	---	117	80-120%	---	---	
Ethylbenzene	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Hexachlorobutadiene	1.18	0.0500	0.100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
2-Hexanone	1.97	0.250	0.500	mg/kg wet	50	2.00	---	99	80-120%	---	---	
Isopropylbenzene	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
4-Isopropyltoluene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Methylene chloride	0.872	0.125	0.250	mg/kg wet	50	1.00	---	87	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.05	0.250	0.500	mg/kg wet	50	2.00	---	103	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.962	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Naphthalene	1.05	0.0500	0.100	mg/kg wet	50	1.00	---	105	80-120%	---	---	
n-Propylbenzene	0.994	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Styrene	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.17	0.0125	0.0250	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.867	0.0250	0.0500	mg/kg wet	50	1.00	---	87	80-120%	---	---	
Tetrachloroethene (PCE)	1.13	0.0125	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	
Toluene	0.982	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	1.07	0.125	0.250	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,2,4-Trichlorobenzene	1.09	0.125	0.250	mg/kg wet	50	1.00	---	109	80-120%	---	---	
1,1,1-Trichloroethane	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,1,2-Trichloroethane	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Trichloroethene (TCE)	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Trichlorofluoromethane	1.43	0.0500	0.100	mg/kg wet	50	1.00	---	143	80-120%	---	---	Q-56
1,2,3-Trichloropropane	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,2,4-Trimethylbenzene	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,3,5-Trimethylbenzene	0.999	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
LCS (9071206-BS1)						Prepared: 07/23/19 21:30 Analyzed: 07/23/19 21:43						
Vinyl chloride	0.964	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
m,p-Xylene	2.12	0.0250	0.0500	mg/kg wet	50	2.00	---	106	80-120%	---	---	
o-Xylene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>				<i>Recovery: 90 %</i>	<i>Limits: 80-120 %</i>	<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>				<i>99 %</i>	<i>80-120 %</i>	<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>				<i>97 %</i>	<i>80-120 %</i>	<i>"</i>						

Duplicate (9071206-DUP1)

Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44

QC Source Sample: DP-1(11-12.5) (A9G0676-02)**5035A/8260C**

Acetone	ND	0.620	1.24	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00620	0.0124	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.620	0.620	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP1)			Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44									
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
1,2-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0316	0.0316	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.310	0.620	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.155	0.310	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP1)			Prepared: 07/18/19 10:32 Analyzed: 07/24/19 02:44									
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
1,1,2-Trichloroethane	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0620	0.124	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0155	0.0310	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0310	0.0620	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0316	0.0316	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (9071206-DUP2)

Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51

QC Source Sample: DP-7(11.5-13) (A9G0676-24)**5035A/8260C**

Acetone	ND	0.508	1.02	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	0.00508	0.0102	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.508	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP2)			Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51									
QC Source Sample: DP-7(11.5-13) (A9G0676-24)												
Chloromethane	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.254	0.508	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Duplicate (9071206-DUP2)			Prepared: 07/19/19 09:40 Analyzed: 07/24/19 06:51									
QC Source Sample: DP-7(11.5-13) (A9G0676-24)												
1,1,1,2-Tetrachloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.127	0.254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0508	0.102	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0127	0.0254	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0254	0.0508	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0259	0.0259	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 88 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						

Matrix Spike (9071206-MS1)

Prepared: 07/19/19 11:35 Analyzed: 07/24/19 09:08

QC Source Sample: DP-13(5-6.5) (A9G0676-46)**5035A/8260C**

Acetone	3.39	0.780	1.56	mg/kg dry	50	3.12	ND	109	36-164%	---	---	
Acrylonitrile	1.28	0.0780	0.156	mg/kg dry	50	1.56	ND	82	65-134%	---	---	
Benzene	1.30	0.00780	0.0156	mg/kg dry	50	1.56	ND	83	77-121%	---	---	
Bromobenzene	1.52	0.0195	0.0390	mg/kg dry	50	1.56	ND	97	78-121%	---	---	
Bromochloromethane	1.39	0.0390	0.0780	mg/kg dry	50	1.56	ND	89	78-125%	---	---	
Bromodichloromethane	1.67	0.0390	0.0780	mg/kg dry	50	1.56	ND	107	75-127%	---	---	
Bromoform	1.97	0.0780	0.156	mg/kg dry	50	1.56	ND	127	67-132%	---	---	Q-54h
Bromomethane	1.68	0.780	0.780	mg/kg dry	50	1.56	ND	108	53-143%	---	---	
2-Butanone (MEK)	2.71	0.390	0.780	mg/kg dry	50	3.12	ND	87	51-148%	---	---	
n-Butylbenzene	1.65	0.0390	0.0780	mg/kg dry	50	1.56	ND	106	70-128%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Matrix Spike (9071206-MS1)			Prepared: 07/19/19 11:35		Analyzed: 07/24/19 09:08							
QC Source Sample: DP-13(5-6.5) (A9G0676-46)												
sec-Butylbenzene	1.57	0.0390	0.0780	mg/kg dry	50	1.56	ND	101	73-126%	---	---	
tert-Butylbenzene	1.67	0.0390	0.0780	mg/kg dry	50	1.56	ND	107	73-125%	---	---	
Carbon disulfide	1.30	0.390	0.780	mg/kg dry	50	1.56	ND	84	63-132%	---	---	
Carbon tetrachloride	1.79	0.0390	0.0780	mg/kg dry	50	1.56	ND	115	70-135%	---	---	
Chlorobenzene	1.57	0.0195	0.0390	mg/kg dry	50	1.56	ND	101	79-120%	---	---	
Chloroethane	1.65	0.390	0.780	mg/kg dry	50	1.56	ND	106	59-139%	---	---	
Chloroform	1.58	0.0390	0.0780	mg/kg dry	50	1.56	ND	101	78-123%	---	---	
Chloromethane	1.15	0.195	0.390	mg/kg dry	50	1.56	ND	74	50-136%	---	---	
2-Chlorotoluene	1.54	0.0390	0.0780	mg/kg dry	50	1.56	ND	99	75-122%	---	---	
4-Chlorotoluene	1.49	0.0390	0.0780	mg/kg dry	50	1.56	ND	96	72-124%	---	---	
Dibromochloromethane	1.90	0.0780	0.156	mg/kg dry	50	1.56	ND	122	74-126%	---	---	Q-54n
1,2-Dibromo-3-chloropropane	1.57	0.195	0.390	mg/kg dry	50	1.56	ND	101	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.61	0.0390	0.0780	mg/kg dry	50	1.56	ND	103	78-122%	---	---	
Dibromomethane	1.51	0.0390	0.0780	mg/kg dry	50	1.56	ND	97	78-125%	---	---	
1,2-Dichlorobenzene	1.55	0.0195	0.0390	mg/kg dry	50	1.56	ND	100	78-121%	---	---	
1,3-Dichlorobenzene	1.55	0.0195	0.0390	mg/kg dry	50	1.56	ND	99	77-121%	---	---	
1,4-Dichlorobenzene	1.50	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	75-120%	---	---	
Dichlorodifluoromethane	1.65	0.0780	0.156	mg/kg dry	50	1.56	ND	106	29-149%	---	---	
1,1-Dichloroethane	1.41	0.0195	0.0390	mg/kg dry	50	1.56	ND	90	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.62	0.0195	0.0390	mg/kg dry	50	1.56	ND	104	73-128%	---	---	
1,1-Dichloroethene	1.49	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	70-131%	---	---	
cis-1,2-Dichloroethene	1.48	0.0195	0.0390	mg/kg dry	50	1.56	ND	95	77-123%	---	---	
trans-1,2-Dichloroethene	1.49	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	74-125%	---	---	
1,2-Dichloropropane	1.30	0.0195	0.0390	mg/kg dry	50	1.56	ND	83	76-123%	---	---	
1,3-Dichloropropane	1.61	0.0390	0.0780	mg/kg dry	50	1.56	ND	103	77-121%	---	---	
2,2-Dichloropropane	1.42	0.0390	0.0780	mg/kg dry	50	1.56	ND	91	67-133%	---	---	
1,1-Dichloropropene	1.39	0.0390	0.0780	mg/kg dry	50	1.56	ND	89	76-125%	---	---	
cis-1,3-Dichloropropene	1.60	0.0390	0.0780	mg/kg dry	50	1.56	ND	102	74-126%	---	---	
trans-1,3-Dichloropropene	1.71	0.0390	0.0780	mg/kg dry	50	1.56	ND	110	71-130%	---	---	
Ethylbenzene	1.59	0.0195	0.0390	mg/kg dry	50	1.56	ND	101	76-122%	---	---	
Hexachlorobutadiene	2.47	0.0780	0.156	mg/kg dry	50	1.56	ND	158	61-135%	---	---	Q-01
2-Hexanone	2.98	0.390	0.780	mg/kg dry	50	3.12	ND	96	53-145%	---	---	
Isopropylbenzene	1.62	0.0390	0.0780	mg/kg dry	50	1.56	ND	104	68-134%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071206 - EPA 5035A						Soil						
Matrix Spike (9071206-MS1)			Prepared: 07/19/19 11:35		Analyzed: 07/24/19 09:08							
QC Source Sample: DP-13(5-6.5) (A9G0676-46)												
4-Isopropyltoluene	1.62	0.0390	0.0780	mg/kg dry	50	1.56	ND	104	73-127%	---	---	
Methylene chloride	1.33	0.195	0.390	mg/kg dry	50	1.56	ND	85	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3.32	0.390	0.780	mg/kg dry	50	3.12	ND	107	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.42	0.0390	0.0780	mg/kg dry	50	1.56	ND	91	73-125%	---	---	
Naphthalene	1.64	0.0780	0.156	mg/kg dry	50	1.56	ND	105	62-129%	---	---	
n-Propylbenzene	1.50	0.0195	0.0390	mg/kg dry	50	1.56	ND	96	73-125%	---	---	
Styrene	1.55	0.0390	0.0780	mg/kg dry	50	1.56	ND	100	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.77	0.0195	0.0390	mg/kg dry	50	1.56	ND	114	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1.44	0.0390	0.0780	mg/kg dry	50	1.56	ND	89	70-124%	---	---	
Tetrachloroethene (PCE)	1.83	0.0195	0.0390	mg/kg dry	50	1.56	0.141	108	73-128%	---	---	
Toluene	1.50	0.0390	0.0780	mg/kg dry	50	1.56	ND	96	77-121%	---	---	
1,2,3-Trichlorobenzene	1.71	0.195	0.390	mg/kg dry	50	1.56	ND	110	66-130%	---	---	
1,2,4-Trichlorobenzene	1.72	0.195	0.390	mg/kg dry	50	1.56	ND	110	67-129%	---	---	
1,1,1-Trichloroethane	1.65	0.0195	0.0390	mg/kg dry	50	1.56	ND	106	73-130%	---	---	
1,1,2-Trichloroethane	1.55	0.0195	0.0390	mg/kg dry	50	1.56	ND	100	78-121%	---	---	
Trichloroethene (TCE)	1.53	0.0195	0.0390	mg/kg dry	50	1.56	ND	98	77-123%	---	---	
Trichlorofluoromethane	2.07	0.0780	0.156	mg/kg dry	50	1.56	ND	133	62-140%	---	---	Q-54i
1,2,3-Trichloropropane	1.60	0.0390	0.0780	mg/kg dry	50	1.56	ND	103	73-125%	---	---	
1,2,4-Trimethylbenzene	1.59	0.0390	0.0780	mg/kg dry	50	1.56	0.0585	98	75-123%	---	---	
1,3,5-Trimethylbenzene	1.58	0.0390	0.0780	mg/kg dry	50	1.56	0.0405	99	73-124%	---	---	
Vinyl chloride	1.40	0.0195	0.0390	mg/kg dry	50	1.56	ND	90	56-135%	---	---	
m,p-Xylene	3.27	0.0390	0.0780	mg/kg dry	50	3.12	0.0468	103	77-124%	---	---	
o-Xylene	1.57	0.0195	0.0390	mg/kg dry	50	1.56	0.0678	96	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 87 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 14:51							
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 14:51							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 83 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Blank (9071232-BLK1)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 14:51							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						
LCS (9071232-BS2)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 13:56							
5035A/8260C												
Acetone	1.90	0.500	1.00	mg/kg wet	50	2.00	---	95	80-120%	---	---	
Acrylonitrile	0.832	0.0500	0.100	mg/kg wet	50	1.00	---	83	80-120%	---	---	
Benzene	0.817	0.00500	0.0100	mg/kg wet	50	1.00	---	82	80-120%	---	---	
Bromobenzene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromochloromethane	0.843	0.0250	0.0500	mg/kg wet	50	1.00	---	84	80-120%	---	---	
Bromodichloromethane	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
Bromoform	1.35	0.0500	0.100	mg/kg wet	50	1.00	---	135	80-120%	---	---	Q-56
Bromomethane	1.01	0.500	0.500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
2-Butanone (MEK)	1.68	0.250	0.500	mg/kg wet	50	2.00	---	84	80-120%	---	---	
n-Butylbenzene	0.999	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
sec-Butylbenzene	0.969	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
tert-Butylbenzene	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Carbon disulfide	0.837	0.250	0.500	mg/kg wet	50	1.00	---	84	80-120%	---	---	
Carbon tetrachloride	1.16	0.0250	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Chlorobenzene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Chloroethane	1.07	0.250	0.500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
Chloroform	0.974	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Chloromethane	0.752	0.250	0.250	mg/kg wet	50	1.00	---	75	80-120%	---	---	Q-55
2-Chlorotoluene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
4-Chlorotoluene	0.982	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Dibromochloromethane	1.22	0.0500	0.100	mg/kg wet	50	1.00	---	122	80-120%	---	---	Q-56
1,2-Dibromo-3-chloropropane	0.946	0.125	0.250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Dibromomethane	0.909	0.0250	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,2-Dichlorobenzene	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,3-Dichlorobenzene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,4-Dichlorobenzene	0.994	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Dichlorodifluoromethane	0.991	0.0500	0.100	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,1-Dichloroethane	0.886	0.0125	0.0250	mg/kg wet	50	1.00	---	89	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
LCS (9071232-BS2)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 13:56							
1,2-Dichloroethane (EDC)	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,1-Dichloroethene	0.961	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
cis-1,2-Dichloroethene	0.926	0.0125	0.0250	mg/kg wet	50	1.00	---	93	80-120%	---	---	
trans-1,2-Dichloroethene	0.908	0.0125	0.0250	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,2-Dichloropropane	0.824	0.0125	0.0250	mg/kg wet	50	1.00	---	82	80-120%	---	---	
1,3-Dichloropropane	1.05	0.0250	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
2,2-Dichloropropane	1.11	0.0250	0.0500	mg/kg wet	50	1.00	---	111	80-120%	---	---	
1,1-Dichloropropene	0.885	0.0250	0.0500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
cis-1,3-Dichloropropene	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
trans-1,3-Dichloropropene	1.16	0.0250	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Ethylbenzene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Hexachlorobutadiene	1.14	0.0500	0.100	mg/kg wet	50	1.00	---	114	80-120%	---	---	
2-Hexanone	1.86	0.250	0.500	mg/kg wet	50	2.00	---	93	80-120%	---	---	
Isopropylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
4-Isopropyltoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Methylene chloride	0.841	0.125	0.250	mg/kg wet	50	1.00	---	84	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.90	0.250	0.500	mg/kg wet	50	2.00	---	95	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.904	0.0250	0.0500	mg/kg wet	50	1.00	---	90	80-120%	---	---	
Naphthalene	1.01	0.0500	0.100	mg/kg wet	50	1.00	---	101	80-120%	---	---	
n-Propylbenzene	0.960	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Styrene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.17	0.0125	0.0250	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.862	0.0250	0.0500	mg/kg wet	50	1.00	---	86	80-120%	---	---	
Tetrachloroethene (PCE)	1.14	0.0125	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	
Toluene	0.972	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	1.01	0.125	0.250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,2,4-Trichlorobenzene	1.04	0.125	0.250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,1,1-Trichloroethane	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,1,2-Trichloroethane	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Trichloroethene (TCE)	0.960	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Trichlorofluoromethane	1.26	0.0500	0.100	mg/kg wet	50	1.00	---	126	80-120%	---	---	Q-56
1,2,3-Trichloropropane	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,2,4-Trimethylbenzene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,3,5-Trimethylbenzene	0.990	0.0250	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
LCS (9071232-BS2)			Prepared: 07/24/19 12:00		Analyzed: 07/24/19 13:56							
Vinyl chloride	0.884	0.0125	0.0250	mg/kg wet	50	1.00	---	88	80-120%	---	---	
m,p-Xylene	2.10	0.0250	0.0500	mg/kg wet	50	2.00	---	105	80-120%	---	---	
o-Xylene	0.983	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 86 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

Duplicate (9071232-DUP1)

Prepared: 07/19/19 10:35 Analyzed: 07/24/19 16:40

QC Source Sample: DP-10(6-7.5) (A9G0676-35)**5035A/8260C**

Acetone	ND	0.647	1.29	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00647	0.0129	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.647	0.647	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.324	0.324	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Duplicate (9071232-DUP1)			Prepared: 07/19/19 10:35		Analyzed: 07/24/19 16:40							
QC Source Sample: DP-10(6-7.5) (A9G0676-35)												
1,2-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0330	0.0330	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.324	0.647	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.162	0.324	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Duplicate (9071232-DUP1)			Prepared: 07/19/19 10:35 Analyzed: 07/24/19 16:40									
QC Source Sample: DP-10(6-7.5) (A9G0676-35)												
1,1,2-Trichloroethane	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0647	0.129	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0162	0.0324	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0324	0.0647	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0330	0.0330	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
Matrix Spike (9071232-MS1)						Prepared: 07/19/19 10:50 Analyzed: 07/24/19 17:35						
QC Source Sample: DP-11(6-7.5) (A9G0676-38)												
5035A/8260C												
Acetone	2.90	0.652	1.30	mg/kg dry	50	2.61	ND	111	36-164%	---	---	
Acrylonitrile	1.31	0.0652	0.130	mg/kg dry	50	1.30	ND	101	65-134%	---	---	
Benzene	1.19	0.00652	0.0130	mg/kg dry	50	1.30	ND	91	77-121%	---	---	
Bromobenzene	1.35	0.0163	0.0326	mg/kg dry	50	1.30	ND	103	78-121%	---	---	
Bromochloromethane	1.23	0.0326	0.0652	mg/kg dry	50	1.30	ND	94	78-125%	---	---	
Bromodichloromethane	1.41	0.0326	0.0652	mg/kg dry	50	1.30	ND	108	75-127%	---	---	
Bromoform	1.64	0.0652	0.130	mg/kg dry	50	1.30	ND	126	67-132%	---	---	Q-54e
Bromomethane	1.50	0.652	0.652	mg/kg dry	50	1.30	ND	115	53-143%	---	---	
2-Butanone (MEK)	2.46	0.326	0.652	mg/kg dry	50	2.61	ND	94	51-148%	---	---	
n-Butylbenzene	1.34	0.0326	0.0652	mg/kg dry	50	1.30	ND	103	70-128%	---	---	
sec-Butylbenzene	1.31	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	73-126%	---	---	
tert-Butylbenzene	1.28	0.0326	0.0652	mg/kg dry	50	1.30	ND	98	73-125%	---	---	
Carbon disulfide	1.27	0.326	0.652	mg/kg dry	50	1.30	ND	97	63-132%	---	---	
Carbon tetrachloride	1.40	0.0326	0.0652	mg/kg dry	50	1.30	ND	107	70-135%	---	---	
Chlorobenzene	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	79-120%	---	---	
Chloroethane	1.27	0.326	0.652	mg/kg dry	50	1.30	ND	98	59-139%	---	---	
Chloroform	1.34	0.0326	0.0652	mg/kg dry	50	1.30	ND	103	78-123%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A						Soil						
Matrix Spike (9071232-MS1)			Prepared: 07/19/19 10:50		Analyzed: 07/24/19 17:35							
QC Source Sample: DP-11(6-7.5) (A9G0676-38)												
Chloromethane	1.10	0.326	0.326	mg/kg dry	50	1.30	ND	84	50-136%	---	---	Q-54x
2-Chlorotoluene	1.30	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	75-122%	---	---	
4-Chlorotoluene	1.23	0.0326	0.0652	mg/kg dry	50	1.30	ND	95	72-124%	---	---	
Dibromochloromethane	1.51	0.0652	0.130	mg/kg dry	50	1.30	ND	116	74-126%	---	---	Q-54g
1,2-Dibromo-3-chloropropane	1.25	0.163	0.326	mg/kg dry	50	1.30	ND	96	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.41	0.0326	0.0652	mg/kg dry	50	1.30	ND	108	78-122%	---	---	
Dibromomethane	1.26	0.0326	0.0652	mg/kg dry	50	1.30	ND	97	78-125%	---	---	
1,2-Dichlorobenzene	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	78-121%	---	---	
1,3-Dichlorobenzene	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	77-121%	---	---	
1,4-Dichlorobenzene	1.28	0.0163	0.0326	mg/kg dry	50	1.30	ND	98	75-120%	---	---	
Dichlorodifluoromethane	1.27	0.0652	0.130	mg/kg dry	50	1.30	ND	97	29-149%	---	---	
1,1-Dichloroethane	1.27	0.0163	0.0326	mg/kg dry	50	1.30	ND	97	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.28	0.0163	0.0326	mg/kg dry	50	1.30	ND	98	73-128%	---	---	
1,1-Dichloroethene	1.27	0.0163	0.0326	mg/kg dry	50	1.30	ND	97	70-131%	---	---	
cis-1,2-Dichloroethene	1.31	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	77-123%	---	---	
trans-1,2-Dichloroethene	1.29	0.0163	0.0326	mg/kg dry	50	1.30	ND	99	74-125%	---	---	
1,2-Dichloropropane	1.19	0.0163	0.0326	mg/kg dry	50	1.30	ND	91	76-123%	---	---	
1,3-Dichloropropane	1.34	0.0326	0.0652	mg/kg dry	50	1.30	ND	102	77-121%	---	---	
2,2-Dichloropropane	1.32	0.0326	0.0652	mg/kg dry	50	1.30	ND	101	67-133%	---	---	
1,1-Dichloropropene	1.24	0.0326	0.0652	mg/kg dry	50	1.30	ND	95	76-125%	---	---	
cis-1,3-Dichloropropene	1.35	0.0326	0.0652	mg/kg dry	50	1.30	ND	103	74-126%	---	---	
trans-1,3-Dichloropropene	1.40	0.0326	0.0652	mg/kg dry	50	1.30	ND	107	71-130%	---	---	
Ethylbenzene	1.29	0.0163	0.0326	mg/kg dry	50	1.30	ND	97	76-122%	---	---	
Hexachlorobutadiene	1.89	0.0652	0.130	mg/kg dry	50	1.30	ND	145	61-135%	---	---	Q-01
2-Hexanone	2.42	0.326	0.652	mg/kg dry	50	2.61	ND	93	53-145%	---	---	
Isopropylbenzene	1.31	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	68-134%	---	---	
4-Isopropyltoluene	1.31	0.0326	0.0652	mg/kg dry	50	1.30	ND	101	73-127%	---	---	
Methylene chloride	1.34	0.163	0.326	mg/kg dry	50	1.30	ND	103	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3.40	0.326	0.652	mg/kg dry	50	2.61	0.831	99	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.23	0.0326	0.0652	mg/kg dry	50	1.30	ND	94	73-125%	---	---	
Naphthalene	1.40	0.0652	0.130	mg/kg dry	50	1.30	ND	107	62-129%	---	---	
n-Propylbenzene	1.25	0.0163	0.0326	mg/kg dry	50	1.30	ND	96	73-125%	---	---	
Styrene	1.29	0.0326	0.0652	mg/kg drv	50	1.30	ND	99	76-124%	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071232 - EPA 5035A							Soil					
Matrix Spike (9071232-MS1)			Prepared: 07/19/19 10:50 Analyzed: 07/24/19 17:35									
QC Source Sample: DP-11(6-7.5) (A9G0676-38)												
1,1,1,2-Tetrachloroethane	1.46	0.0163	0.0326	mg/kg dry	50	1.30	ND	112	78-125%	---	---	Q-54r
1,1,2,2-Tetrachloroethane	1.29	0.0717	0.0717	mg/kg dry	50	1.30	ND	99	70-124%	---	---	
Tetrachloroethene (PCE)	1.49	0.0163	0.0326	mg/kg dry	50	1.30	0.0978	107	73-128%	---	---	
Toluene	1.28	0.0326	0.0652	mg/kg dry	50	1.30	ND	98	77-121%	---	---	
1,2,3-Trichlorobenzene	1.38	0.163	0.326	mg/kg dry	50	1.30	ND	106	66-130%	---	---	
1,2,4-Trichlorobenzene	1.41	0.163	0.326	mg/kg dry	50	1.30	ND	108	67-129%	---	---	
1,1,1-Trichloroethane	1.31	0.0163	0.0326	mg/kg dry	50	1.30	ND	100	73-130%	---	---	
1,1,2-Trichloroethane	1.32	0.0163	0.0326	mg/kg dry	50	1.30	ND	101	78-121%	---	---	
Trichloroethene (TCE)	1.34	0.0163	0.0326	mg/kg dry	50	1.30	ND	103	77-123%	---	---	
Trichlorofluoromethane	1.36	0.0652	0.130	mg/kg dry	50	1.30	ND	104	62-140%	---	---	
1,2,3-Trichloropropane	1.32	0.0326	0.0652	mg/kg dry	50	1.30	ND	101	73-125%	---	---	
1,2,4-Trimethylbenzene	1.30	0.0326	0.0652	mg/kg dry	50	1.30	ND	100	75-123%	---	---	
1,3,5-Trimethylbenzene	1.29	0.0326	0.0652	mg/kg dry	50	1.30	ND	99	73-124%	---	---	
Vinyl chloride	1.28	0.0163	0.0326	mg/kg dry	50	1.30	ND	98	56-135%	---	---	
m,p-Xylene	2.59	0.0326	0.0652	mg/kg dry	50	2.61	ND	98	77-124%	---	---	
o-Xylene	1.25	0.0163	0.0326	mg/kg dry	50	1.30	0.0482	92	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 95 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Blank (9071347-BLK1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 12:33							
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Blank (9071347-BLK1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 12:33							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	0.0560	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	B-02, J
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	0.0763	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	B
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	0.0237	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	B-02, J
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
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EPA ID: OR01039

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Blank (9071347-BLK1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 12:33							
Surr: Toluene-d8 (Surr)		Recovery: 100 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
LCS (9071347-BS1)			Prepared: 08/02/19 08:00		Analyzed: 08/02/19 11:39							A-01
5035A/8260C												
Acetone	1.61	0.500	1.00	mg/kg wet	50	2.00	---	81	80-120%	---	---	
Acrylonitrile	0.963	0.0500	0.100	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Benzene	1.00	0.00500	0.0100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromobenzene	0.976	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Bromodichloromethane	0.943	0.0250	0.0500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
Bromoform	0.906	0.0500	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Bromomethane	1.10	0.500	0.500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
2-Butanone (MEK)	1.96	0.250	0.500	mg/kg wet	50	2.00	---	98	80-120%	---	---	
n-Butylbenzene	1.04	0.250	0.250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
sec-Butylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
tert-Butylbenzene	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Carbon disulfide	0.854	0.250	0.500	mg/kg wet	50	1.00	---	85	80-120%	---	---	
Carbon tetrachloride	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chlorobenzene	0.992	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Chloroethane	1.04	0.250	0.500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloroform	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chloromethane	0.918	0.125	0.250	mg/kg wet	50	1.00	---	92	80-120%	---	---	
2-Chlorotoluene	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
4-Chlorotoluene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Dibromochloromethane	0.882	0.0500	0.100	mg/kg wet	50	1.00	---	88	80-120%	---	---	
1,2-Dibromo-3-chloropropane	1.01	0.125	0.250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.960	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Dibromomethane	0.924	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
1,2-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3-Dichlorobenzene	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
1,4-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Dichlorodifluoromethane	1.13	0.0500	0.100	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,1-Dichloroethane	0.949	0.0125	0.0250	mg/kg wet	50	1.00	---	95	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
LCS (9071347-BS1)						Prepared: 08/02/19 08:00 Analyzed: 08/02/19 11:39					A-01	
1,2-Dichloroethane (EDC)	1.00	0.0125	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,1-Dichloroethene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
cis-1,2-Dichloroethene	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2-Dichloropropane	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,3-Dichloropropane	0.956	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
2,2-Dichloropropane	1.13	0.0250	0.0500	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,1-Dichloropropene	1.10	0.0250	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
cis-1,3-Dichloropropene	0.961	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
trans-1,3-Dichloropropene	0.962	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Ethylbenzene	1.02	0.0125	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Hexachlorobutadiene	1.04	0.0500	0.100	mg/kg wet	50	1.00	---	104	80-120%	---	---	B-02
2-Hexanone	1.98	0.250	0.500	mg/kg wet	50	2.00	---	99	80-120%	---	---	
Isopropylbenzene	1.16	0.0250	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
4-Isopropyltoluene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Methylene chloride	0.948	0.125	0.250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.99	0.250	0.500	mg/kg wet	50	2.00	---	100	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Naphthalene	0.902	0.0500	0.100	mg/kg wet	50	1.00	---	90	80-120%	---	---	B
n-Propylbenzene	1.16	0.0125	0.0250	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Styrene	1.07	0.0250	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,1,1,2-Tetrachloroethane	0.974	0.0125	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.908	0.0250	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Tetrachloroethene (PCE)	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Toluene	0.980	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	0.941	0.125	0.250	mg/kg wet	50	1.00	---	94	80-120%	---	---	
1,2,4-Trichlorobenzene	0.912	0.125	0.250	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,1,1-Trichloroethane	1.06	0.0125	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,1,2-Trichloroethane	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Trichloroethene (TCE)	1.06	0.0125	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Trichlorofluoromethane	1.04	0.0500	0.100	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,2,3-Trichloropropane	0.963	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	B-02
1,3,5-Trimethylbenzene	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
LCS (9071347-BS1)						Prepared: 08/02/19 08:00 Analyzed: 08/02/19 11:39						A-01
Vinyl chloride	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
m,p-Xylene	2.15	0.0250	0.0500	mg/kg wet	50	2.00	---	108	80-120%	---	---	
o-Xylene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>"</i>						

Duplicate (9071347-DUP1)

Prepared: 07/19/19 10:55 Analyzed: 08/02/19 15:53

QC Source Sample: DP-11(10-11.5) (A9G0676-39)**5035A/8260C**

Acetone	ND	0.555	1.11	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00555	0.0111	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.555	0.555	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.277	0.277	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A						Soil						
Duplicate (9071347-DUP1)			Prepared: 07/19/19 10:55		Analyzed: 08/02/19 15:53							
QC Source Sample: DP-11(10-11.5) (A9G0676-39)												
1,2-Dichlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.277	0.555	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.139	0.277	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071347 - EPA 5035A							Soil					
Duplicate (9071347-DUP1)			Prepared: 07/19/19 10:55 Analyzed: 08/02/19 15:53									
QC Source Sample: DP-11(10-11.5) (A9G0676-39)												
1,1,2-Trichloroethane	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0555	0.111	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0139	0.0277	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0277	0.0555	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	0.0150	0.0139	0.0277	mg/kg dry	50	---	0.0152	---	---	1	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Blank (9080523-BLK1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 16:32							
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Blank (9080523-BLK1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 16:32							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	0.114	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	B-02, J
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Blank (9080523-BLK1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 16:32							
Surr: Toluene-d8 (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						
LCS (9080523-BS1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 15:38							
5035A/8260C												
Acetone	2.42	0.500	1.00	mg/kg wet	50	2.00	---	121	80-120%	---	---	Q-56
Acrylonitrile	1.24	0.0500	0.100	mg/kg wet	50	1.00	---	124	80-120%	---	---	Q-56
Benzene	1.08	0.00500	0.0100	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Bromobenzene	0.937	0.0125	0.0250	mg/kg wet	50	1.00	---	94	80-120%	---	---	
Bromochloromethane	1.24	0.0250	0.0500	mg/kg wet	50	1.00	---	124	80-120%	---	---	Q-56
Bromodichloromethane	1.14	0.0250	0.0500	mg/kg wet	50	1.00	---	114	80-120%	---	---	
Bromoform	0.997	0.0500	0.100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromomethane	2.19	0.500	0.500	mg/kg wet	50	1.00	---	219	80-120%	---	---	Q-56
2-Butanone (MEK)	2.46	0.250	0.500	mg/kg wet	50	2.00	---	123	80-120%	---	---	Q-56
n-Butylbenzene	0.955	0.0250	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
sec-Butylbenzene	0.971	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
tert-Butylbenzene	0.977	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Carbon disulfide	1.25	0.250	0.500	mg/kg wet	50	1.00	---	125	80-120%	---	---	Q-56
Carbon tetrachloride	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Chlorobenzene	0.965	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Chloroethane	1.28	0.250	0.500	mg/kg wet	50	1.00	---	128	80-120%	---	---	Q-56
Chloroform	1.13	0.0250	0.0500	mg/kg wet	50	1.00	---	113	80-120%	---	---	
Chloromethane	0.978	0.125	0.250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
2-Chlorotoluene	0.920	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
4-Chlorotoluene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dibromochloromethane	0.910	0.0500	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.981	0.125	0.250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Dibromomethane	1.21	0.0250	0.0500	mg/kg wet	50	1.00	---	121	80-120%	---	---	Q-56
1,2-Dichlorobenzene	0.993	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,3-Dichlorobenzene	0.994	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,4-Dichlorobenzene	0.950	0.0125	0.0250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Dichlorodifluoromethane	0.851	0.0500	0.100	mg/kg wet	50	1.00	---	85	80-120%	---	---	
1,1-Dichloroethane	1.14	0.0125	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
LCS (9080523-BS1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 15:38							
1,2-Dichloroethane (EDC)	1.14	0.0125	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	
1,1-Dichloroethene	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
cis-1,2-Dichloroethene	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
trans-1,2-Dichloroethene	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,2-Dichloropropane	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
1,3-Dichloropropane	1.02	0.0250	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
2,2-Dichloropropane	1.18	0.0250	0.0500	mg/kg wet	50	1.00	---	118	80-120%	---	---	
1,1-Dichloropropene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
cis-1,3-Dichloropropene	0.922	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
trans-1,3-Dichloropropene	1.05	0.0500	0.100	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Ethylbenzene	0.985	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Hexachlorobutadiene	0.808	0.0500	0.100	mg/kg wet	50	1.00	---	81	80-120%	---	---	
2-Hexanone	2.14	0.250	0.500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
Isopropylbenzene	0.916	0.0250	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
4-Isopropyltoluene	0.892	0.0250	0.0500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Methylene chloride	1.20	0.125	0.250	mg/kg wet	50	1.00	---	120	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.25	0.250	0.500	mg/kg wet	50	2.00	---	112	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.983	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Naphthalene	0.807	0.0500	0.100	mg/kg wet	50	1.00	---	81	80-120%	---	---	
n-Propylbenzene	0.987	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Styrene	0.877	0.0250	0.0500	mg/kg wet	50	1.00	---	88	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Tetrachloroethene (PCE)	0.963	0.0125	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Toluene	0.980	0.0250	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	0.902	0.125	0.250	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2,4-Trichlorobenzene	0.793	0.250	0.250	mg/kg wet	50	1.00	---	79	80-120%	---	---	Q-55
1,1,1-Trichloroethane	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,1,2-Trichloroethane	1.08	0.0125	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Trichloroethene (TCE)	1.05	0.0125	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Trichlorofluoromethane	1.21	0.0500	0.100	mg/kg wet	50	1.00	---	121	80-120%	---	---	Q-56
1,2,3-Trichloropropane	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,3,5-Trimethylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
LCS (9080523-BS1)			Prepared: 08/01/19 12:00		Analyzed: 08/01/19 15:38							
Vinyl chloride	1.47	0.0125	0.0250	mg/kg wet	50	1.00	---	147	80-120%	---	---	Q-56
m,p-Xylene	2.13	0.0250	0.0500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
o-Xylene	0.973	0.0125	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		80-120 %		"						

Duplicate (9080523-DUP1)

Prepared: 07/18/19 11:40 Analyzed: 08/01/19 17:26

QC Source Sample: DP-2(25-26.5) (A9G0676-09)**5035A/8260C**

Acetone	ND	0.707	1.41	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00707	0.0141	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.707	0.707	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.177	0.353	mg/kg dry	50	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Dibromochloromethane	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	0.177	0.353	mg/kg dry	50	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%
Dibromomethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP1)			Prepared: 07/18/19 11:40 Analyzed: 08/01/19 17:26									
QC Source Sample: DP-2(25-26.5) (A9G0676-09)												
1,2-Dichlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.360	0.360	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.353	0.707	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.177	0.353	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.353	0.353	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP1)			Prepared: 07/18/19 11:40 Analyzed: 08/01/19 17:26									
QC Source Sample: DP-2(25-26.5) (A9G0676-09)												
1,1,2-Trichloroethane	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0707	0.141	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0353	0.0707	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0177	0.0353	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		98 %		80-120 %		"						

Duplicate (9080523-DUP2)				Prepared: 07/31/19 18:15 Analyzed: 08/01/19 22:26							V-15
QC Source Sample: Non-SDG (A9G0983-03)											
Acetone	ND	0.740	1.48	mg/kg dry	50	---	ND	---	---	---	30%
Acrylonitrile	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%
Benzene	ND	0.00740	0.0148	mg/kg dry	50	---	ND	---	---	---	30%
Bromobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%
Bromochloromethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
Bromoform	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%
Bromomethane	ND	0.740	0.740	mg/kg dry	50	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%
n-Butylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
sec-Butylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
tert-Butylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
Carbon disulfide	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
Chlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%
Chloroethane	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%
Chloroform	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%
Chloromethane	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP2)			Prepared: 07/31/19 18:15		Analyzed: 08/01/19 22:26		V-15					
QC Source Sample: Non-SDG (A9G0983-03)												
2-Chlorotoluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.370	0.740	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Duplicate (9080523-DUP2)			Prepared: 07/31/19 18:15 Analyzed: 08/01/19 22:26						V-15			
QC Source Sample: Non-SDG (A9G0983-03)												
1,1,2,2-Tetrachloroethane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.185	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.370	0.370	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0740	0.148	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0185	0.0370	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0370	0.0740	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0378	0.0378	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 108 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		95 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						

Matrix Spike (9080523-MS1)

Prepared: 07/24/19 15:45 Analyzed: 08/01/19 18:21

QC Source Sample: Non-SDG (A9G0777-02)**5035A/8260C**

Acetone	3.60	0.634	1.27	mg/kg dry	50	2.53	ND	142	36-164%	---	---	Q-54b
Acrylonitrile	1.79	0.0634	0.127	mg/kg dry	50	1.26	ND	142	65-134%	---	---	Q-54m
Benzene	1.46	0.00634	0.0127	mg/kg dry	50	1.26	ND	116	77-121%	---	---	
Bromobenzene	1.42	0.0158	0.0317	mg/kg dry	50	1.26	ND	113	78-121%	---	---	
Bromochloromethane	1.63	0.0317	0.0634	mg/kg dry	50	1.26	ND	129	78-125%	---	---	Q-54l
Bromodichloromethane	1.62	0.0317	0.0634	mg/kg dry	50	1.26	ND	128	75-127%	---	---	Q-01
Bromoform	1.22	0.0634	0.127	mg/kg dry	50	1.26	ND	97	67-132%	---	---	
Bromomethane	2.80	0.634	0.634	mg/kg dry	50	1.26	ND	222	53-143%	---	---	Q-54u
2-Butanone (MEK)	3.74	0.317	0.634	mg/kg dry	50	2.53	ND	148	51-148%	---	---	Q-54k
n-Butylbenzene	2.10	0.0317	0.0634	mg/kg dry	50	1.26	0.395	135	70-128%	---	---	Q-01
sec-Butylbenzene	1.72	0.0317	0.0634	mg/kg dry	50	1.26	0.174	122	73-126%	---	---	

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A							Soil					
Matrix Spike (9080523-MS1)			Prepared: 07/24/19 15:45			Analyzed: 08/01/19 18:21						
QC Source Sample: Non-SDG (A9G0777-02)												
tert-Butylbenzene	1.58	0.0317	0.0634	mg/kg dry	50	1.26	ND	125	73-125%	---	---	Q-54p
Carbon disulfide	1.59	0.317	0.634	mg/kg dry	50	1.26	ND	126	63-132%	---	---	
Carbon tetrachloride	1.35	0.0317	0.0634	mg/kg dry	50	1.26	ND	107	70-135%	---	---	
Chlorobenzene	1.24	0.0158	0.0317	mg/kg dry	50	1.26	ND	98	79-120%	---	---	Q-54t
Chloroethane	1.53	0.317	0.634	mg/kg dry	50	1.26	ND	121	59-139%	---	---	
Chloroform	1.54	0.0317	0.0634	mg/kg dry	50	1.26	ND	121	78-123%	---	---	
Chloromethane	1.29	0.158	0.317	mg/kg dry	50	1.26	ND	102	50-136%	---	---	Q-54
2-Chlorotoluene	1.43	0.0317	0.0634	mg/kg dry	50	1.26	ND	113	75-122%	---	---	
4-Chlorotoluene	1.46	0.0317	0.0634	mg/kg dry	50	1.26	ND	115	72-124%	---	---	
Dibromochloromethane	1.19	0.0634	0.127	mg/kg dry	50	1.26	ND	94	74-126%	---	---	Q-54
1,2-Dibromo-3-chloropropane	1.41	0.158	0.317	mg/kg dry	50	1.26	ND	111	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.34	0.0317	0.0634	mg/kg dry	50	1.26	ND	106	78-122%	---	---	
Dibromomethane	1.76	0.0317	0.0634	mg/kg dry	50	1.26	ND	139	78-125%	---	---	Q-54
1,2-Dichlorobenzene	1.33	0.0158	0.0317	mg/kg dry	50	1.26	ND	105	78-121%	---	---	
1,3-Dichlorobenzene	1.36	0.0158	0.0317	mg/kg dry	50	1.26	ND	107	77-121%	---	---	
1,4-Dichlorobenzene	1.26	0.0158	0.0317	mg/kg dry	50	1.26	ND	100	75-120%	---	---	Q-01
Dichlorodifluoromethane	1.18	0.0634	0.127	mg/kg dry	50	1.26	ND	93	29-149%	---	---	
1,1-Dichloroethane	1.45	0.0158	0.0317	mg/kg dry	50	1.26	ND	115	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.61	0.0158	0.0317	mg/kg dry	50	1.26	ND	128	73-128%	---	---	Q-01
1,1-Dichloroethene	1.40	0.0158	0.0317	mg/kg dry	50	1.26	ND	111	70-131%	---	---	
cis-1,2-Dichloroethene	1.48	0.0158	0.0317	mg/kg dry	50	1.26	ND	117	77-123%	---	---	
trans-1,2-Dichloroethene	1.38	0.0158	0.0317	mg/kg dry	50	1.26	ND	109	74-125%	---	---	Q-01
1,2-Dichloropropane	1.53	0.0158	0.0317	mg/kg dry	50	1.26	ND	121	76-123%	---	---	
1,3-Dichloropropane	1.35	0.0317	0.0634	mg/kg dry	50	1.26	ND	107	77-121%	---	---	
2,2-Dichloropropane	1.54	0.0317	0.0634	mg/kg dry	50	1.26	ND	122	67-133%	---	---	Q-01
1,1-Dichloropropene	1.41	0.0317	0.0634	mg/kg dry	50	1.26	ND	111	76-125%	---	---	
cis-1,3-Dichloropropene	1.25	0.0317	0.0634	mg/kg dry	50	1.26	ND	99	74-126%	---	---	
trans-1,3-Dichloropropene	1.35	0.0634	0.127	mg/kg dry	50	1.26	ND	107	71-130%	---	---	Q-01
Ethylbenzene	1.41	0.0158	0.0317	mg/kg dry	50	1.26	0.145	100	76-122%	---	---	
Hexachlorobutadiene	1.81	0.0634	0.127	mg/kg dry	50	1.26	ND	143	61-135%	---	---	
2-Hexanone	2.73	0.317	0.634	mg/kg dry	50	2.53	ND	108	53-145%	---	---	Q-01
Isopropylbenzene	1.42	0.0317	0.0634	mg/kg dry	50	1.26	0.0673	107	68-134%	---	---	
4-Isopropyltoluene	1.65	0.0317	0.0634	mg/kg dry	50	1.26	0.140	120	73-127%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street
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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080523 - EPA 5035A						Soil						
Matrix Spike (9080523-MS1)			Prepared: 07/24/19 15:45 Analyzed: 08/01/19 18:21									
QC Source Sample: Non-SDG (A9G0777-02)												
Methylene chloride	1.67	0.158	0.317	mg/kg dry	50	1.26	ND	106	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	2.83	0.317	0.634	mg/kg dry	50	2.53	ND	112	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.48	0.0317	0.0634	mg/kg dry	50	1.26	ND	117	73-125%	---	---	
Naphthalene	1.67	0.0634	0.127	mg/kg dry	50	1.26	0.231	114	62-129%	---	---	
n-Propylbenzene	1.81	0.0158	0.0317	mg/kg dry	50	1.26	0.291	120	73-125%	---	---	
Styrene	1.24	0.0317	0.0634	mg/kg dry	50	1.26	ND	98	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.32	0.0158	0.0317	mg/kg dry	50	1.26	ND	105	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1.30	0.0317	0.0634	mg/kg dry	50	1.26	ND	100	70-124%	---	---	
Tetrachloroethene (PCE)	1.12	0.0158	0.0317	mg/kg dry	50	1.26	ND	89	73-128%	---	---	
Toluene	1.18	0.0317	0.0634	mg/kg dry	50	1.26	0.0509	90	77-121%	---	---	
1,2,3-Trichlorobenzene	1.37	0.158	0.317	mg/kg dry	50	1.26	ND	108	66-130%	---	---	
1,2,4-Trichlorobenzene	1.42	0.317	0.317	mg/kg dry	50	1.26	ND	112	67-129%	---	---	Q-54v
1,1,1-Trichloroethane	1.47	0.0158	0.0317	mg/kg dry	50	1.26	ND	116	73-130%	---	---	
1,1,2-Trichloroethane	1.44	0.0158	0.0317	mg/kg dry	50	1.26	ND	114	78-121%	---	---	
Trichloroethene (TCE)	1.44	0.0158	0.0317	mg/kg dry	50	1.26	ND	114	77-123%	---	---	
Trichlorofluoromethane	1.43	0.0634	0.127	mg/kg dry	50	1.26	ND	113	62-140%	---	---	Q-54a
1,2,3-Trichloropropane	1.38	0.0317	0.0634	mg/kg dry	50	1.26	ND	102	73-125%	---	---	
1,2,4-Trimethylbenzene	3.19	0.0317	0.0634	mg/kg dry	50	1.26	1.65	122	75-123%	---	---	
1,3,5-Trimethylbenzene	2.02	0.0317	0.0634	mg/kg dry	50	1.26	0.440	125	73-124%	---	---	Q-01
Vinyl chloride	1.91	0.0158	0.0317	mg/kg dry	50	1.26	ND	151	56-135%	---	---	Q-54j
m,p-Xylene	3.33	0.0317	0.0634	mg/kg dry	50	2.53	0.484	113	77-124%	---	---	
o-Xylene	1.89	0.0158	0.0317	mg/kg dry	50	1.26	0.373	120	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		107 %		Limits:		80-120 %		Dilution: 1x		
Toluene-d8 (Surr)				89 %				80-120 %		"		
4-Bromofluorobenzene (Surr)				104 %				80-120 %		"		

Apex Laboratories

Philip Nerenberg, Lab Director

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00 Analyzed: 08/02/19 13:12									
5035A/8260C												
Acetone	ND	0.333	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	0.00333	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	0.333	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 13:12							
1,2-Dichloropropane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.167	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	0.0667	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.0833	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.167	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0333	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0167	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	0.00833	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 106 %		Limits: 80-120 %		Dilution: 1x						

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Philip Nerenberg, Lab Director

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Blank (9080584-BLK1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 13:12							
Surr: Toluene-d8 (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						
LCS (9080584-BS1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 12:18							
5035A/8260C												
Acetone	2.32	0.500	1.00	mg/kg wet	50	2.00	---	116	80-120%	---	---	
Acrylonitrile	1.18	0.0500	0.100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Benzene	1.12	0.00500	0.0100	mg/kg wet	50	1.00	---	112	80-120%	---	---	
Bromobenzene	0.984	0.0125	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	1.26	0.0250	0.0500	mg/kg wet	50	1.00	---	126	80-120%	---	---	Q-56
Bromodichloromethane	1.14	0.0250	0.0500	mg/kg wet	50	1.00	---	114	80-120%	---	---	
Bromoform	0.997	0.0500	0.100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromomethane	2.24	0.500	0.500	mg/kg wet	50	1.00	---	224	80-120%	---	---	Q-56
2-Butanone (MEK)	2.25	0.250	0.500	mg/kg wet	50	2.00	---	113	80-120%	---	---	
n-Butylbenzene	0.995	0.0250	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
sec-Butylbenzene	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
tert-Butylbenzene	1.06	0.0250	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Carbon disulfide	1.31	0.250	0.500	mg/kg wet	50	1.00	---	131	80-120%	---	---	Q-56
Carbon tetrachloride	1.08	0.0250	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Chlorobenzene	1.01	0.0125	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chloroethane	1.20	0.250	0.500	mg/kg wet	50	1.00	---	120	80-120%	---	---	
Chloroform	1.17	0.0250	0.0500	mg/kg wet	50	1.00	---	117	80-120%	---	---	
Chloromethane	0.999	0.125	0.250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
2-Chlorotoluene	0.973	0.0250	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
4-Chlorotoluene	1.09	0.0250	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
Dibromochloromethane	0.903	0.0500	0.100	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.903	0.125	0.250	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.997	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Dibromomethane	1.22	0.0250	0.0500	mg/kg wet	50	1.00	---	122	80-120%	---	---	Q-56
1,2-Dichlorobenzene	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,3-Dichlorobenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,4-Dichlorobenzene	0.990	0.0125	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Dichlorodifluoromethane	0.906	0.0500	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,1-Dichloroethane	1.13	0.0125	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
LCS (9080584-BS1)						Prepared: 08/02/19 11:00 Analyzed: 08/02/19 12:18						
1,2-Dichloroethane (EDC)	1.15	0.0125	0.0250	mg/kg wet	50	1.00	---	115	80-120%	---	---	
1,1-Dichloroethene	1.15	0.0125	0.0250	mg/kg wet	50	1.00	---	115	80-120%	---	---	
cis-1,2-Dichloroethene	1.13	0.0125	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	
trans-1,2-Dichloroethene	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,2-Dichloropropane	1.10	0.0125	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,3-Dichloropropane	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
2,2-Dichloropropane	1.28	0.0250	0.0500	mg/kg wet	50	1.00	---	128	80-120%	---	---	Q-56
1,1-Dichloropropene	1.09	0.0250	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
cis-1,3-Dichloropropene	0.955	0.0250	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
trans-1,3-Dichloropropene	1.08	0.0500	0.100	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Ethylbenzene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Hexachlorobutadiene	0.851	0.0500	0.100	mg/kg wet	50	1.00	---	85	80-120%	---	---	
2-Hexanone	2.06	0.250	0.500	mg/kg wet	50	2.00	---	103	80-120%	---	---	
Isopropylbenzene	1.01	0.0250	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
4-Isopropyltoluene	0.950	0.0250	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Methylene chloride	1.19	0.125	0.250	mg/kg wet	50	1.00	---	119	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.14	0.250	0.500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Naphthalene	0.747	0.100	0.100	mg/kg wet	50	1.00	---	75	80-120%	---	---	Q-55
n-Propylbenzene	1.06	0.0125	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Styrene	0.944	0.0250	0.0500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.07	0.0125	0.0250	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1.04	0.0250	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Tetrachloroethene (PCE)	1.03	0.0125	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Toluene	1.00	0.0250	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	0.876	0.125	0.250	mg/kg wet	50	1.00	---	88	80-120%	---	---	
1,2,4-Trichlorobenzene	0.778	0.250	0.250	mg/kg wet	50	1.00	---	78	80-120%	---	---	Q-55
1,1,1-Trichloroethane	1.17	0.0125	0.0250	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,1,2-Trichloroethane	1.11	0.0125	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
Trichloroethene (TCE)	1.11	0.0125	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
Trichlorofluoromethane	1.17	0.0500	0.100	mg/kg wet	50	1.00	---	117	80-120%	---	---	
1,2,3-Trichloropropane	1.03	0.0250	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,2,4-Trimethylbenzene	1.05	0.0250	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,3,5-Trimethylbenzene	1.11	0.0250	0.0500	mg/kg wet	50	1.00	---	111	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
LCS (9080584-BS1)			Prepared: 08/02/19 11:00		Analyzed: 08/02/19 12:18							
Vinyl chloride	1.60	0.0125	0.0250	mg/kg wet	50	1.00	---	160	80-120%	---	---	Q-56
m,p-Xylene	2.32	0.0250	0.0500	mg/kg wet	50	2.00	---	116	80-120%	---	---	
o-Xylene	1.04	0.0125	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

Duplicate (9080584-DUP1)

Prepared: 07/31/19 18:15 Analyzed: 08/02/19 17:29

V-15**QC Source Sample: Non-SDG (A9G0983-05RE1)**

Acetone	ND	18.8	37.6	mg/kg wet	2000	---	ND	---	---	---	30%
Acrylonitrile	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%
Benzene	ND	0.188	0.376	mg/kg wet	2000	---	ND	---	---	---	30%
Bromobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%
Bromochloromethane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Bromodichloromethane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Bromoform	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%
Bromomethane	ND	18.8	18.8	mg/kg wet	2000	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%
n-Butylbenzene	1.98	0.940	1.88	mg/kg wet	2000	---	1.90	---	---	4	30%
sec-Butylbenzene	2.26	0.940	1.88	mg/kg wet	2000	---	2.16	---	---	4	30%
tert-Butylbenzene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Carbon disulfide	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%
Carbon tetrachloride	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Chlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%
Chloroethane	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%
Chloroform	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Chloromethane	ND	4.70	9.40	mg/kg wet	2000	---	ND	---	---	---	30%
2-Chlorotoluene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
4-Chlorotoluene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Dibromochloromethane	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	4.70	9.40	mg/kg wet	2000	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
Dibromomethane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Duplicate (9080584-DUP1)			Prepared: 07/31/19 18:15		Analyzed: 08/02/19 17:29							V-15
QC Source Sample: Non-SDG (A9G0983-05RE1)												
1,3-Dichlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
Ethylbenzene	1.66	0.470	0.940	mg/kg wet	2000	---	1.56	---	---	6	30%	
Hexachlorobutadiene	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
2-Hexanone	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
Isopropylbenzene	2.78	0.940	1.88	mg/kg wet	2000	---	2.56	---	---	8	30%	
4-Isopropyltoluene	2.18	0.940	1.88	mg/kg wet	2000	---	2.04	---	---	7	30%	
Methylene chloride	ND	11.5	11.5	mg/kg wet	2000	---	ND	---	---	---	30%	A-01a
4-Methyl-2-pentanone (MiBK)	ND	9.40	18.8	mg/kg wet	2000	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Naphthalene	ND	3.76	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
n-Propylbenzene	4.51	0.470	0.940	mg/kg wet	2000	---	4.28	---	---	5	30%	
Styrene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	5.64	5.64	mg/kg wet	2000	---	ND	---	---	---	30%	R-02
Tetrachloroethene (PCE)	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Toluene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	4.70	9.40	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	9.40	9.40	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Duplicate (9080584-DUP1)			Prepared: 07/31/19 18:15 Analyzed: 08/02/19 17:29						V-15			
QC Source Sample: Non-SDG (A9G0983-05RE1)												
Trichloroethene (TCE)	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	1.88	3.76	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.940	1.88	mg/kg wet	2000	---	ND	---	---	---	30%	
o-Xylene	ND	0.470	0.940	mg/kg wet	2000	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		93 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
Matrix Spike (9080584-MS1)			Prepared: 07/19/19 11:40 Analyzed: 08/02/19 20:39									
QC Source Sample: DP-13(10-11.5) (A9G0676-47)												
5035A/8260C												
Acetone	3.73	0.677	1.35	mg/kg dry	50	2.71	ND	138	36-164%	---	---	
Acrylonitrile	1.75	0.0677	0.135	mg/kg dry	50	1.35	ND	129	65-134%	---	---	
Benzene	1.52	0.00677	0.0135	mg/kg dry	50	1.35	ND	112	77-121%	---	---	
Bromobenzene	1.28	0.0169	0.0338	mg/kg dry	50	1.35	ND	94	78-121%	---	---	
Bromochloromethane	1.80	0.0338	0.0677	mg/kg dry	50	1.35	ND	133	78-125%	---	---	Q-54q
Bromodichloromethane	1.63	0.0338	0.0677	mg/kg dry	50	1.35	ND	120	75-127%	---	---	
Bromoform	1.33	0.0677	0.135	mg/kg dry	50	1.35	ND	98	67-132%	---	---	
Bromomethane	3.29	0.677	0.677	mg/kg dry	50	1.35	ND	243	53-143%	---	---	Q-54c
2-Butanone (MEK)	3.59	0.338	0.677	mg/kg dry	50	2.71	ND	133	51-148%	---	---	
n-Butylbenzene	1.19	0.0338	0.0677	mg/kg dry	50	1.35	ND	88	70-128%	---	---	
sec-Butylbenzene	1.28	0.0338	0.0677	mg/kg dry	50	1.35	ND	95	73-126%	---	---	
tert-Butylbenzene	1.28	0.0338	0.0677	mg/kg dry	50	1.35	ND	95	73-125%	---	---	
Carbon disulfide	1.73	0.338	0.677	mg/kg dry	50	1.35	ND	128	63-132%	---	---	Q-54d
Carbon tetrachloride	1.50	0.0338	0.0677	mg/kg dry	50	1.35	ND	111	70-135%	---	---	
Chlorobenzene	1.31	0.0169	0.0338	mg/kg dry	50	1.35	ND	97	79-120%	---	---	
Chloroethane	2.13	0.338	0.677	mg/kg dry	50	1.35	ND	157	59-139%	---	---	Q-01
Chloroform	1.62	0.0338	0.0677	mg/kg dry	50	1.35	ND	120	78-123%	---	---	
Chloromethane	1.45	0.169	0.338	mg/kg dry	50	1.35	ND	107	50-136%	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Matrix Spike (9080584-MS1)			Prepared: 07/19/19 11:40		Analyzed: 08/02/19 20:39							
QC Source Sample: DP-13(10-11.5) (A9G0676-47)												
2-Chlorotoluene	1.23	0.0338	0.0677	mg/kg dry	50	1.35	ND	91	75-122%	---	---	
4-Chlorotoluene	1.37	0.0338	0.0677	mg/kg dry	50	1.35	ND	101	72-124%	---	---	
Dibromochloromethane	1.24	0.0677	0.135	mg/kg dry	50	1.35	ND	91	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1.30	0.169	0.338	mg/kg dry	50	1.35	ND	96	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.34	0.0338	0.0677	mg/kg dry	50	1.35	ND	99	78-122%	---	---	
Dibromomethane	1.73	0.0338	0.0677	mg/kg dry	50	1.35	ND	128	78-125%	---	---	Q-54f
1,2-Dichlorobenzene	1.35	0.0169	0.0338	mg/kg dry	50	1.35	ND	100	78-121%	---	---	
1,3-Dichlorobenzene	1.35	0.0169	0.0338	mg/kg dry	50	1.35	ND	100	77-121%	---	---	
1,4-Dichlorobenzene	1.27	0.0169	0.0338	mg/kg dry	50	1.35	ND	94	75-120%	---	---	
Dichlorodifluoromethane	1.22	0.0677	0.135	mg/kg dry	50	1.35	ND	90	29-149%	---	---	
1,1-Dichloroethane	1.67	0.0169	0.0338	mg/kg dry	50	1.35	ND	123	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.63	0.0169	0.0338	mg/kg dry	50	1.35	ND	121	73-128%	---	---	
1,1-Dichloroethene	1.52	0.0169	0.0338	mg/kg dry	50	1.35	ND	112	70-131%	---	---	
cis-1,2-Dichloroethene	1.53	0.0169	0.0338	mg/kg dry	50	1.35	ND	113	77-123%	---	---	
trans-1,2-Dichloroethene	1.47	0.0169	0.0338	mg/kg dry	50	1.35	ND	109	74-125%	---	---	
1,2-Dichloropropane	1.53	0.0169	0.0338	mg/kg dry	50	1.35	ND	113	76-123%	---	---	
1,3-Dichloropropane	1.38	0.0338	0.0677	mg/kg dry	50	1.35	ND	102	77-121%	---	---	
2,2-Dichloropropane	1.44	0.0338	0.0677	mg/kg dry	50	1.35	ND	107	67-133%	---	---	Q-54s
1,1-Dichloropropene	1.42	0.0338	0.0677	mg/kg dry	50	1.35	ND	105	76-125%	---	---	
cis-1,3-Dichloropropene	1.19	0.0338	0.0677	mg/kg dry	50	1.35	ND	88	74-126%	---	---	
trans-1,3-Dichloropropene	1.38	0.0677	0.135	mg/kg dry	50	1.35	ND	102	71-130%	---	---	
Ethylbenzene	1.35	0.0169	0.0338	mg/kg dry	50	1.35	ND	100	76-122%	---	---	
Hexachlorobutadiene	1.02	0.0677	0.135	mg/kg dry	50	1.35	ND	76	61-135%	---	---	
2-Hexanone	2.92	0.338	0.677	mg/kg dry	50	2.71	ND	108	53-145%	---	---	
Isopropylbenzene	1.20	0.0338	0.0677	mg/kg dry	50	1.35	ND	89	68-134%	---	---	
4-Isopropyltoluene	1.15	0.0338	0.0677	mg/kg dry	50	1.35	ND	85	73-127%	---	---	
Methylene chloride	1.80	0.169	0.338	mg/kg dry	50	1.35	ND	112	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3.06	0.338	0.677	mg/kg dry	50	2.71	ND	113	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.39	0.0338	0.0677	mg/kg dry	50	1.35	ND	103	73-125%	---	---	
Naphthalene	0.986	0.135	0.135	mg/kg dry	50	1.35	ND	73	62-129%	---	---	Q-54y
n-Propylbenzene	1.33	0.0169	0.0338	mg/kg dry	50	1.35	ND	98	73-125%	---	---	
Styrene	1.17	0.0338	0.0677	mg/kg dry	50	1.35	ND	86	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.40	0.0169	0.0338	mg/kg dry	50	1.35	ND	103	78-125%	---	---	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 5035A/8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080584 - EPA 5035A						Soil						
Matrix Spike (9080584-MS1)			Prepared: 07/19/19 11:40		Analyzed: 08/02/19 20:39							
QC Source Sample: DP-13(10-11.5) (A9G0676-47)												
1,1,2,2-Tetrachloroethane	1.49	0.0338	0.0677	mg/kg dry	50	1.35	ND	110	70-124%	---	---	Q-54w
Tetrachloroethene (PCE)	1.30	0.0169	0.0338	mg/kg dry	50	1.35	ND	96	73-128%	---	---	
Toluene	1.32	0.0338	0.0677	mg/kg dry	50	1.35	ND	97	77-121%	---	---	
1,2,3-Trichlorobenzene	1.13	0.169	0.338	mg/kg dry	50	1.35	ND	84	66-130%	---	---	
1,2,4-Trichlorobenzene	0.958	0.338	0.338	mg/kg dry	50	1.35	ND	71	67-129%	---	---	
1,1,1-Trichloroethane	1.61	0.0169	0.0338	mg/kg dry	50	1.35	ND	119	73-130%	---	---	Q-54o
1,1,2-Trichloroethane	1.47	0.0169	0.0338	mg/kg dry	50	1.35	ND	109	78-121%	---	---	
Trichloroethene (TCE)	1.44	0.0169	0.0338	mg/kg dry	50	1.35	ND	106	77-123%	---	---	
Trichlorofluoromethane	1.85	0.0677	0.135	mg/kg dry	50	1.35	ND	137	62-140%	---	---	
1,2,3-Trichloropropane	1.47	0.0338	0.0677	mg/kg dry	50	1.35	ND	108	73-125%	---	---	
1,2,4-Trimethylbenzene	1.35	0.0338	0.0677	mg/kg dry	50	1.35	ND	100	75-123%	---	---	
1,3,5-Trimethylbenzene	1.42	0.0338	0.0677	mg/kg dry	50	1.35	ND	105	73-124%	---	---	
Vinyl chloride	2.14	0.0169	0.0338	mg/kg dry	50	1.35	ND	158	56-135%	---	---	
m,p-Xylene	2.94	0.0338	0.0677	mg/kg dry	50	2.71	ND	108	77-124%	---	---	
o-Xylene	1.27	0.0169	0.0338	mg/kg dry	50	1.35	ND	94	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		91 %		80-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071261 - EPA 3546						Soil						
Blank (9071261-BLK1)			Prepared: 07/25/19 07:05 Analyzed: 07/26/19 08:57						C-07			
EPA 8082A												
Aroclor 1016	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 100 %		Limits: 60-125 %		Dilution: 1x						
LCS (9071261-BS1)			Prepared: 07/25/19 07:05 Analyzed: 07/26/19 09:14						C-07			
EPA 8082A												
Aroclor 1016	0.150	0.00500	0.0100	mg/kg wet	1	0.250	---	60	47-134%	---	---	
Aroclor 1260	0.182	0.00500	0.0100	mg/kg wet	1	0.250	---	73	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 98 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (9071261-DUP1)			Prepared: 07/25/19 07:05 Analyzed: 07/26/19 10:07						C-07			
QC Source Sample: DP-1(11-12.5) (A9G0676-02)												
EPA 8082A												
Aroclor 1016	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	0.00543	0.0109	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 94 %		Limits: 60-125 %		Dilution: 1x						
Matrix Spike (9071261-MS1)			Prepared: 07/25/19 07:05 Analyzed: 07/29/19 09:57						C-07			
QC Source Sample: Non-SDG (A9G0705-02)												
EPA 8082A												
Aroclor 1016	0.188	0.00664	0.0133	mg/kg dry	1	0.332	ND	57	47-134%	---	---	
Aroclor 1260	0.230	0.00664	0.0133	mg/kg dry	1	0.332	ND	69	53-140%	---	---	

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Philip Nerenberg, Lab Director

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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 9071261 - EPA 3546							Soil					
Matrix Spike (9071261-MS1)			Prepared: 07/25/19 07:05 Analyzed: 07/29/19 09:57									C-07
<u>QC Source Sample: Non-SDG (A9G0705-02)</u>												
Surr: Decachlorobiphenyl (Surr)				Recovery: 86 %		Limits: 60-125 %		Dilution: 1x				

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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 9081235 - EPA 3546						Soil						
Blank (9081235-BLK1)			Prepared: 08/22/19 06:48		Analyzed: 08/22/19 12:32		C-07					
EPA 8082A												
Aroclor 1016	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.00182	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 100 %		Limits: 60-125 %		Dilution: 1x						
LCS (9081235-BS1)			Prepared: 08/22/19 06:48		Analyzed: 08/22/19 12:50		C-07					
EPA 8082A												
Aroclor 1016	0.184	0.00200	0.00400	mg/kg wet	1	0.250	---	74	47-134%	---	---	
Aroclor 1260	0.215	0.00200	0.00400	mg/kg wet	1	0.250	---	86	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 102 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (9081235-DUP1)			Prepared: 08/22/19 06:48		Analyzed: 08/22/19 13:45		C-07					
QC Source Sample: DP-11(10-11.5) (A9G0676-39)												
EPA 8082A												
Aroclor 1016	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	0.00212	0.00424	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 97 %		Limits: 60-125 %		Dilution: 1x						
Duplicate (9081235-DUP2)			Prepared: 08/22/19 13:04		Analyzed: 08/23/19 08:43		C-07					
QC Source Sample: Non-SDG (A9H0254-01RE1)												
Aroclor 1016	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9081235 - EPA 3546						Soil						
Duplicate (9081235-DUP2)			Prepared: 08/22/19 13:04 Analyzed: 08/23/19 08:43					C-07				
QC Source Sample: Non-SDG (A9H0254-01RE1)												
Aroclor 1242	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	P-10 J
Aroclor 1248	ND	0.00458	0.00917	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1254	0.0127	0.00458	0.00917	mg/kg wet	1	---	0.0150	---	---	17	30%	
Aroclor 1260	0.00527	0.00458	0.00917	mg/kg wet	1	---	0.00649	---	---	21	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 94 %		Limits: 60-125 %		Dilution: 1x						
Matrix Spike (9081235-MS1)			Prepared: 08/22/19 06:48 Analyzed: 08/22/19 15:35					C-07				
QC Source Sample: Non-SDG (A9H0684-06)												
EPA 8082A												
Aroclor 1016	0.176	0.00551	0.0110	mg/kg dry	1	0.276	ND	64	47-134%	---	---	
Aroclor 1260	0.209	0.00551	0.0110	mg/kg dry	1	0.276	ND	76	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 86 %		Limits: 60-125 %		Dilution: 1x						

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071207 - EPA 3546						Soil						
Blank (9071207-BLK1)			Prepared: 07/24/19 07:01 Analyzed: 07/24/19 16:59									
EPA 8270D (SIM)												
Acenaphthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	0.00455	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 81 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		105 %		54-127 %		"						

LCS (9071207-BS1)

Prepared: 07/24/19 07:01 Analyzed: 07/24/19 17:25

EPA 8270D (SIM)												
Acenaphthene	0.618	0.00500	0.0100	mg/kg wet	1	0.800	---	77	40-122%	---	---	
Acenaphthylene	0.604	0.00500	0.0100	mg/kg wet	1	0.800	---	76	32-132%	---	---	
Anthracene	0.668	0.00500	0.0100	mg/kg wet	1	0.800	---	83	47-123%	---	---	
Benz(a)anthracene	0.642	0.00500	0.0100	mg/kg wet	1	0.800	---	80	49-126%	---	---	
Benzo(a)pyrene	0.793	0.00500	0.0100	mg/kg wet	1	0.800	---	99	45-129%	---	---	
Benzo(b)fluoranthene	0.777	0.00500	0.0100	mg/kg wet	1	0.800	---	97	45-132%	---	---	
Benzo(k)fluoranthene	0.746	0.00500	0.0100	mg/kg wet	1	0.800	---	93	47-132%	---	---	
Benzo(g,h,i)perylene	0.579	0.00500	0.0100	mg/kg wet	1	0.800	---	72	43-134%	---	---	
Chrysene	0.701	0.00500	0.0100	mg/kg wet	1	0.800	---	88	50-124%	---	---	

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Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071207 - EPA 3546						Soil						
LCS (9071207-BS1)			Prepared: 07/24/19 07:01		Analyzed: 07/24/19 17:25							
Dibenz(a,h)anthracene	0.650	0.00500	0.0100	mg/kg wet	1	0.800	---	81	45-134%	---	---	
Dibenzofuran	0.643	0.00500	0.0100	mg/kg wet	1	0.800	---	80	44-120%	---	---	
Fluoranthene	0.680	0.00500	0.0100	mg/kg wet	1	0.800	---	85	50-127%	---	---	
Fluorene	0.644	0.00500	0.0100	mg/kg wet	1	0.800	---	81	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.607	0.00500	0.0100	mg/kg wet	1	0.800	---	76	45-133%	---	---	
1-Methylnaphthalene	0.639	0.00500	0.0100	mg/kg wet	1	0.800	---	80	40-120%	---	---	
2-Methylnaphthalene	0.629	0.00500	0.0100	mg/kg wet	1	0.800	---	79	38-122%	---	---	
Naphthalene	0.593	0.00500	0.0100	mg/kg wet	1	0.800	---	74	35-123%	---	---	
Phenanthrene	0.633	0.00500	0.0100	mg/kg wet	1	0.800	---	79	50-121%	---	---	
Pyrene	0.664	0.00500	0.0100	mg/kg wet	1	0.800	---	83	47-127%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 82 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		96 %		54-127 %		"						
Duplicate (9071207-DUP1)			Prepared: 07/24/19 07:01		Analyzed: 07/24/19 18:15							
QC Source Sample: Non-SDG (A9G0384-01)												
Acenaphthene	ND	0.879	0.879	mg/kg dry	5	---	ND	---	---	---	30%	R-02
Acenaphthylene	ND	0.261	0.261	mg/kg dry	5	---	ND	---	---	---	30%	R-02
Anthracene	ND	0.295	0.295	mg/kg dry	5	---	ND	---	---	---	30%	R-02
Benz(a)anthracene	ND	0.0687	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Chrysene	ND	0.0687	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
Dibenzofuran	1.19	0.0343	0.0687	mg/kg dry	5	---	1.14	---	---	4	30%	
Fluoranthene	0.0880	0.0343	0.0687	mg/kg dry	5	---	0.0860	---	---	2	30%	
Fluorene	2.18	0.0343	0.0687	mg/kg dry	5	---	2.05	---	---	6	30%	
Indeno(1,2,3-cd)pyrene	ND	0.0343	0.0687	mg/kg dry	5	---	ND	---	---	---	30%	
1-Methylnaphthalene	8.26	0.0343	0.0687	mg/kg dry	5	---	7.94	---	---	4	30%	
2-Methylnaphthalene	6.18	0.0343	0.0687	mg/kg dry	5	---	5.88	---	---	5	30%	
Naphthalene	2.44	0.0343	0.0687	mg/kg dry	5	---	2.36	---	---	3	30%	
Phenanthrene	4.36	0.0343	0.0687	mg/kg dry	5	---	4.04	---	---	8	30%	
Pyrene	0.278	0.0343	0.0687	mg/kg dry	5	---	0.259	---	---	7	30%	

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071207 - EPA 3546						Soil						
Duplicate (9071207-DUP1)			Prepared: 07/24/19 07:01 Analyzed: 07/24/19 18:15									
QC Source Sample: Non-SDG (A9G0384-01)												
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 84 %		Limits: 44-120 %		Dilution: 5x						
p-Terphenyl-d14 (Surr)		100 %		54-127 %		"						
Matrix Spike (9071207-MS1)			Prepared: 07/24/19 07:01 Analyzed: 07/24/19 19:57									
QC Source Sample: Non-SDG (A9G0710-03)												
EPA 8270D (SIM)												
Acenaphthene	0.651	0.00599	0.0120	mg/kg dry	1	0.959	ND	68	40-122%	---	---	
Acenaphthylene	0.586	0.00599	0.0120	mg/kg dry	1	0.959	ND	61	32-132%	---	---	
Anthracene	0.619	0.00599	0.0120	mg/kg dry	1	0.959	ND	65	47-123%	---	---	
Benz(a)anthracene	0.623	0.00599	0.0120	mg/kg dry	1	0.959	0.0136	64	49-126%	---	---	
Benzo(a)pyrene	0.702	0.00599	0.0120	mg/kg dry	1	0.959	ND	73	45-129%	---	---	
Benzo(b)fluoranthene	0.761	0.00599	0.0120	mg/kg dry	1	0.959	0.00783	79	45-132%	---	---	
Benzo(k)fluoranthene	0.738	0.00599	0.0120	mg/kg dry	1	0.959	ND	77	47-132%	---	---	
Benzo(g,h,i)perylene	0.567	0.00599	0.0120	mg/kg dry	1	0.959	ND	59	43-134%	---	---	
Chrysene	0.713	0.00599	0.0120	mg/kg dry	1	0.959	0.0180	72	50-124%	---	---	
Dibenz(a,h)anthracene	0.640	0.00599	0.0120	mg/kg dry	1	0.959	ND	67	45-134%	---	---	
Dibenzofuran	0.686	0.00599	0.0120	mg/kg dry	1	0.959	ND	72	44-120%	---	---	
Fluoranthene	0.701	0.00599	0.0120	mg/kg dry	1	0.959	0.0470	68	50-127%	---	---	
Fluorene	0.684	0.00599	0.0120	mg/kg dry	1	0.959	ND	71	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.593	0.00599	0.0120	mg/kg dry	1	0.959	ND	62	45-133%	---	---	
1-Methylnaphthalene	0.683	0.00599	0.0120	mg/kg dry	1	0.959	ND	71	40-120%	---	---	
2-Methylnaphthalene	0.686	0.00599	0.0120	mg/kg dry	1	0.959	ND	72	38-122%	---	---	
Naphthalene	0.651	0.00599	0.0120	mg/kg dry	1	0.959	0.00605	67	35-123%	---	---	
Phenanthrene	0.810	0.00599	0.0120	mg/kg dry	1	0.959	0.146	69	50-121%	---	---	
Pyrene	0.719	0.00599	0.0120	mg/kg dry	1	0.959	0.0921	65	47-127%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 70 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		78 %		54-127 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Blank (9071408-BLK2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:01							
EPA 8270D												
Acenaphthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Phenol	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Blank (9071408-BLK2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:01							
2,3,5,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.0188	0.0375	mg/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Aniline	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Blank (9071408-BLK2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:01							
Benzoic acid	ND	0.157	0.312	mg/kg wet	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Isophorone	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	Q-41
Pyridine	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 72 %		Limits: 37-122 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		76 %		44-115 %		"						
Phenol-d6 (Surr)		72 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		98 %		54-127 %		"						
2-Fluorophenol (Surr)		72 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		99 %		39-132 %		"						
LCS (9071408-BS2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:37							
EPA 8270D												
Acenaphthene	0.469	0.00266	0.00534	mg/kg wet	2	0.533	---	88	40-122%	---	---	
Acenaphthylene	0.485	0.00266	0.00534	mg/kg wet	2	0.533	---	91	32-132%	---	---	
Anthracene	0.480	0.00266	0.00534	mg/kg wet	2	0.533	---	90	47-123%	---	---	
Benz(a)anthracene	0.483	0.00266	0.00534	mg/kg wet	2	0.533	---	91	49-126%	---	---	
Benzo(a)pyrene	0.574	0.00400	0.00800	mg/kg wet	2	0.533	---	108	45-129%	---	---	
Benzo(b)fluoranthene	0.558	0.00400	0.00800	mg/kg wet	2	0.533	---	105	45-132%	---	---	
Benzo(k)fluoranthene	0.561	0.00400	0.00800	mg/kg wet	2	0.533	---	105	47-132%	---	---	
Benzo(g,h,i)perylene	0.507	0.00266	0.00534	mg/kg wet	2	0.533	---	95	43-134%	---	---	
Chrysene	0.496	0.00266	0.00534	mg/kg wet	2	0.533	---	93	50-124%	---	---	
Dibenz(a,h)anthracene	0.535	0.00266	0.00534	mg/kg wet	2	0.533	---	100	45-134%	---	---	
Fluoranthene	0.492	0.00266	0.00534	mg/kg wet	2	0.533	---	92	50-127%	---	---	
Fluorene	0.505	0.00266	0.00534	mg/kg wet	2	0.533	---	95	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.492	0.00266	0.00534	mg/kg wet	2	0.533	---	92	45-133%	---	---	
1-Methylnaphthalene	0.458	0.00534	0.0107	mg/kg wet	2	0.533	---	86	40-120%	---	---	
2-Methylnaphthalene	0.467	0.00534	0.0107	mg/kg wet	2	0.533	---	88	38-122%	---	---	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
LCS (9071408-BS2)						Prepared: 07/30/19 13:20 Analyzed: 07/30/19 21:37						
Naphthalene	0.427	0.00534	0.0107	mg/kg wet	2	0.533	---	80	35-123%	---	---	
Phenanthrene	0.476	0.00266	0.00534	mg/kg wet	2	0.533	---	89	50-121%	---	---	
Pyrene	0.498	0.00266	0.00534	mg/kg wet	2	0.533	---	93	47-127%	---	---	
Carbazole	0.467	0.00400	0.00800	mg/kg wet	2	0.533	---	88	50-122%	---	---	
Dibenzofuran	0.489	0.00266	0.00534	mg/kg wet	2	0.533	---	92	44-120%	---	---	
4-Chloro-3-methylphenol	0.507	0.0266	0.0534	mg/kg wet	2	0.533	---	95	45-122%	---	---	
2-Chlorophenol	0.452	0.0133	0.0266	mg/kg wet	2	0.533	---	85	34-121%	---	---	
2,4-Dichlorophenol	0.520	0.0133	0.0266	mg/kg wet	2	0.533	---	97	40-122%	---	---	
2,4-Dimethylphenol	0.449	0.0133	0.0266	mg/kg wet	2	0.533	---	84	30-127%	---	---	
2,4-Dinitrophenol	0.667	0.0666	0.133	mg/kg wet	2	0.533	---	125	5-137%	---	---	Q-41
4,6-Dinitro-2-methylphenol	0.699	0.0666	0.133	mg/kg wet	2	0.533	---	131	29-132%	---	---	Q-41
2-Methylphenol	0.438	0.00666	0.0133	mg/kg wet	2	0.533	---	82	32-122%	---	---	
3+4-Methylphenol(s)	0.452	0.00666	0.0133	mg/kg wet	2	0.533	---	85	34-120%	---	---	
2-Nitrophenol	0.526	0.0266	0.0534	mg/kg wet	2	0.533	---	99	36-123%	---	---	Q-41
4-Nitrophenol	0.485	0.0266	0.0534	mg/kg wet	2	0.533	---	91	30-132%	---	---	Q-31
Pentachlorophenol (PCP)	0.559	0.0266	0.0534	mg/kg wet	2	0.533	---	105	25-133%	---	---	
Phenol	0.443	0.00534	0.0107	mg/kg wet	2	0.533	---	83	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.558	0.0133	0.0266	mg/kg wet	2	0.533	---	105	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.589	0.0133	0.0266	mg/kg wet	2	0.533	---	111	40-120%	---	---	Q-41
2,4,5-Trichlorophenol	0.550	0.0133	0.0266	mg/kg wet	2	0.533	---	103	41-124%	---	---	
2,4,6-Trichlorophenol	0.534	0.0133	0.0266	mg/kg wet	2	0.533	---	100	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.501	0.0400	0.0800	mg/kg wet	2	0.533	---	94	51-133%	---	---	
Butyl benzyl phthalate	0.483	0.0266	0.0534	mg/kg wet	2	0.533	---	91	48-132%	---	---	
Diethylphthalate	0.538	0.0266	0.0534	mg/kg wet	2	0.533	---	101	50-124%	---	---	
Dimethylphthalate	0.528	0.0266	0.0534	mg/kg wet	2	0.533	---	99	48-124%	---	---	
Di-n-butylphthalate	0.460	0.0266	0.0534	mg/kg wet	2	0.533	---	86	51-128%	---	---	
Di-n-octyl phthalate	0.551	0.0266	0.0534	mg/kg wet	2	0.533	---	103	44-140%	---	---	
N-Nitrosodimethylamine	0.365	0.00666	0.0133	mg/kg wet	2	0.533	---	68	23-120%	---	---	
N-Nitroso-di-n-propylamine	0.407	0.00666	0.0133	mg/kg wet	2	0.533	---	76	36-120%	---	---	
N-Nitrosodiphenylamine	0.495	0.00666	0.0133	mg/kg wet	2	0.533	---	93	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.417	0.00666	0.0133	mg/kg wet	2	0.533	---	78	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.393	0.00666	0.0133	mg/kg wet	2	0.533	---	74	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.357	0.00666	0.0133	mg/kg wet	2	0.533	---	67	33-131%	---	---	
Hexachlorobenzene	0.497	0.00266	0.00534	mg/kg wet	2	0.533	---	93	44-122%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
LCS (9071408-BS2)			Prepared: 07/30/19 13:20		Analyzed: 07/30/19 21:37							
Hexachlorobutadiene	0.480	0.00666	0.0133	mg/kg wet	2	0.533	---	90	32-123%	---	---	Q-41
Hexachlorocyclopentadiene	0.154	0.0133	0.0266	mg/kg wet	2	0.533	---	29	5-140%	---	---	
Hexachloroethane	0.360	0.00666	0.0133	mg/kg wet	2	0.533	---	67	28-120%	---	---	
2-Chloronaphthalene	0.442	0.00266	0.00534	mg/kg wet	2	0.533	---	83	41-120%	---	---	
1,2-Dichlorobenzene	0.424	0.00666	0.0133	mg/kg wet	2	0.533	---	79	33-120%	---	---	Q-41
1,3-Dichlorobenzene	0.419	0.00666	0.0133	mg/kg wet	2	0.533	---	79	30-120%	---	---	
1,4-Dichlorobenzene	0.425	0.00666	0.0133	mg/kg wet	2	0.533	---	80	31-120%	---	---	
1,2,4-Trichlorobenzene	0.459	0.00666	0.0133	mg/kg wet	2	0.533	---	86	34-120%	---	---	
4-Bromophenyl phenyl ether	0.496	0.00666	0.0133	mg/kg wet	2	0.533	---	93	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.519	0.00666	0.0133	mg/kg wet	2	0.533	---	97	45-121%	---	---	
Aniline	0.359	0.0133	0.0266	mg/kg wet	2	0.533	---	67	7-120%	---	---	
4-Chloroaniline	0.319	0.00666	0.0133	mg/kg wet	2	0.533	---	60	16-120%	---	---	
2-Nitroaniline	0.531	0.0534	0.107	mg/kg wet	2	0.533	---	100	44-127%	---	---	
3-Nitroaniline	0.423	0.0534	0.107	mg/kg wet	2	0.533	---	79	33-120%	---	---	
4-Nitroaniline	0.537	0.0534	0.107	mg/kg wet	2	0.533	---	101	35-120%	---	---	
Nitrobenzene	0.418	0.0266	0.0534	mg/kg wet	2	0.533	---	78	34-122%	---	---	
2,4-Dinitrotoluene	0.564	0.0266	0.0534	mg/kg wet	2	0.533	---	106	48-126%	---	---	
2,6-Dinitrotoluene	0.546	0.0266	0.0534	mg/kg wet	2	0.533	---	102	46-124%	---	---	
Benzoic acid	0.953	0.334	0.666	mg/kg wet	2	1.07	---	89	5-140%	---	---	
Benzyl alcohol	0.431	0.0133	0.0266	mg/kg wet	2	0.533	---	81	29-122%	---	---	
Isophorone	0.427	0.00666	0.0133	mg/kg wet	2	0.533	---	80	30-122%	---	---	
Azobenzene (1,2-DPH)	0.415	0.00666	0.0133	mg/kg wet	2	0.533	---	78	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.453	0.0666	0.133	mg/kg wet	2	0.533	---	85	60-121%	---	---	
3,3'-Dichlorobenzidine	0.952	0.0534	0.107	mg/kg wet	2	1.07	---	89	22-121%	---	---	
1,2-Dinitrobenzene	0.543	0.0666	0.133	mg/kg wet	2	0.533	---	102	44-120%	---	---	
1,3-Dinitrobenzene	0.563	0.0666	0.133	mg/kg wet	2	0.533	---	106	42-127%	---	---	
1,4-Dinitrobenzene	0.608	0.0666	0.133	mg/kg wet	2	0.533	---	114	37-132%	---	---	
Pyridine	0.299	0.0133	0.0266	mg/kg wet	2	0.533	---	56	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery:	81 %	Limits:	37-122 %	Dilution: 2x					
2-Fluorobiphenyl (Surr)				90 %		44-115 %	"					
Phenol-d6 (Surr)				83 %		33-122 %	"					
p-Terphenyl-d14 (Surr)				100 %		54-127 %	"					
2-Fluorophenol (Surr)				83 %		35-115 %	"					
2,4,6-Tribromophenol (Surr)				120 %		39-132 %	"					
											Q-41	

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Duplicate (9071408-DUP4)						Prepared: 07/30/19 13:20 Analyzed: 07/31/19 20:39						
QC Source Sample: DP-10(6-7.5) (A9G0676-35RE2)												
EPA 8270D												
Acenaphthene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	0.00301	0.00146	0.00292	mg/kg dry	1	---	0.00810	---	---	92	30%	Q-05
Anthracene	0.00305	0.00146	0.00292	mg/kg dry	1	---	0.00541	---	---	56	30%	Q-05
Benz(a)anthracene	0.0137	0.00146	0.00292	mg/kg dry	1	---	0.0366	---	---	91	30%	Q-05
Benzo(a)pyrene	0.0218	0.00219	0.00438	mg/kg dry	1	---	0.0695	---	---	105	30%	Q-05
Benzo(b)fluoranthene	0.0232	0.00219	0.00438	mg/kg dry	1	---	0.0779	---	---	108	30%	Q-04
Benzo(k)fluoranthene	0.00834	0.00219	0.00438	mg/kg dry	1	---	0.0261	---	---	103	30%	Q-05
Benzo(g,h,i)perylene	0.0208	0.00146	0.00292	mg/kg dry	1	---	0.0701	---	---	108	30%	Q-04
Chrysene	0.0190	0.00146	0.00292	mg/kg dry	1	---	0.0576	---	---	101	30%	Q-04
Dibenz(a,h)anthracene	0.00230	0.00146	0.00292	mg/kg dry	1	---	0.00669	---	---	98	30%	Q-05, J
Fluoranthene	0.0307	0.00146	0.00292	mg/kg dry	1	---	0.117	---	---	117	30%	Q-04
Fluorene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	0.0174	0.00146	0.00292	mg/kg dry	1	---	0.0557	---	---	105	30%	Q-04
1-Methylnaphthalene	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	0.0132	0.00146	0.00292	mg/kg dry	1	---	0.0471	---	---	112	30%	Q-05
Pyrene	0.0436	0.00146	0.00292	mg/kg dry	1	---	0.164	---	---	116	30%	Q-04
Carbazole	ND	0.00219	0.00438	mg/kg dry	1	---	ND	---	---	---	30%	
Dibenzofuran	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
2-Chlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylphenol	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Nitrophenol	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
4-Nitrophenol	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Duplicate (9071408-DUP4)			Prepared: 07/30/19 13:20		Analyzed: 07/31/19 20:39							
QC Source Sample: DP-10(6-7.5) (A9G0676-35RE2)												
Phenol	ND	0.00292	0.00583	mg/kg dry	1	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	0.0219	0.0438	mg/kg dry	1	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Diethylphthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Dimethylphthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Hexachloroethane	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	0.00146	0.00292	mg/kg dry	1	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Aniline	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
4-Chloroaniline	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
2-Nitroaniline	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	
3-Nitroaniline	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	
4-Nitroaniline	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Duplicate (9071408-DUP4)			Prepared: 07/30/19 13:20 Analyzed: 07/31/19 20:39									
QC Source Sample: DP-10(6-7.5) (A9G0676-35RE2)												
Nitrobenzene	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	Q-52
2,4-Dinitrotoluene	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
2,6-Dinitrotoluene	ND	0.0146	0.0292	mg/kg dry	1	---	ND	---	---	---	30%	
Benzoic acid	ND	0.183	0.364	mg/kg dry	1	---	ND	---	---	---	30%	
Benzyl alcohol	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Isophorone	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	0.00364	0.00730	mg/kg dry	1	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	0.0292	0.0583	mg/kg dry	1	---	ND	---	---	---	30%	
1,2-Dinitrobenzene	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	0.0364	0.0730	mg/kg dry	1	---	ND	---	---	---	30%	
Pyridine	ND	0.00730	0.0146	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 84 %		Limits: 37-122 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		79 %		44-115 %		"						
Phenol-d6 (Surr)		84 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		88 %		54-127 %		"						
2-Fluorophenol (Surr)		79 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		93 %		39-132 %		"						

Matrix Spike (9071408-MS2)

Prepared: 07/30/19 13:20 Analyzed: 07/31/19 21:51

QC Source Sample: Non-SDG (A9G0922-02RE2)**EPA 8270D**

Acenaphthene	0.398	0.00273	0.00547	mg/kg dry	2	0.546	ND	73	40-122%	---	---
Acenaphthylene	0.409	0.00273	0.00547	mg/kg dry	2	0.546	ND	75	32-132%	---	---
Anthracene	0.420	0.00273	0.00547	mg/kg dry	2	0.546	ND	77	47-123%	---	---
Benz(a)anthracene	0.430	0.00273	0.00547	mg/kg dry	2	0.546	ND	79	49-126%	---	---
Benzo(a)pyrene	0.500	0.00410	0.00820	mg/kg dry	2	0.546	ND	92	45-129%	---	---
Benzo(b)fluoranthene	0.483	0.00410	0.00820	mg/kg dry	2	0.546	ND	88	45-132%	---	---
Benzo(k)fluoranthene	0.494	0.00410	0.00820	mg/kg dry	2	0.546	ND	90	47-132%	---	---
Benzo(g,h,i)perylene	0.453	0.00273	0.00547	mg/kg dry	2	0.546	ND	83	43-134%	---	---
Chrysene	0.438	0.00273	0.00547	mg/kg dry	2	0.546	ND	80	50-124%	---	---
Dibenz(a,h)anthracene	0.472	0.00273	0.00547	mg/kg dry	2	0.546	ND	86	45-134%	---	---

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Matrix Spike (9071408-MS2)			Prepared: 07/30/19 13:20		Analyzed: 07/31/19 21:51							
QC Source Sample: Non-SDG (A9G0922-02RE2)												
Fluoranthene	0.443	0.00273	0.00547	mg/kg dry	2	0.546	ND	81	50-127%	---	---	
Fluorene	0.450	0.00273	0.00547	mg/kg dry	2	0.546	ND	82	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.437	0.00273	0.00547	mg/kg dry	2	0.546	ND	80	45-133%	---	---	
1-Methylnaphthalene	0.382	0.00547	0.0109	mg/kg dry	2	0.546	ND	70	40-120%	---	---	
2-Methylnaphthalene	0.395	0.00547	0.0109	mg/kg dry	2	0.546	ND	72	38-122%	---	---	
Naphthalene	0.373	0.00547	0.0109	mg/kg dry	2	0.546	ND	68	35-123%	---	---	
Phenanthrene	0.425	0.00273	0.00547	mg/kg dry	2	0.546	ND	78	50-121%	---	---	
Pyrene	0.448	0.00273	0.00547	mg/kg dry	2	0.546	ND	82	47-127%	---	---	
Carbazole	0.425	0.00410	0.00820	mg/kg dry	2	0.546	ND	78	50-122%	---	---	
Dibenzofuran	0.428	0.00273	0.00547	mg/kg dry	2	0.546	ND	78	44-120%	---	---	
4-Chloro-3-methylphenol	0.426	0.0273	0.0547	mg/kg dry	2	0.546	ND	78	45-122%	---	---	
2-Chlorophenol	0.397	0.0137	0.0273	mg/kg dry	2	0.546	ND	73	34-121%	---	---	
2,4-Dichlorophenol	0.433	0.0137	0.0273	mg/kg dry	2	0.546	ND	79	40-122%	---	---	
2,4-Dimethylphenol	0.370	0.0137	0.0273	mg/kg dry	2	0.546	ND	68	30-127%	---	---	
2,4-Dinitrophenol	0.570	0.0682	0.137	mg/kg dry	2	0.546	ND	104	5-137%	---	---	Q-41
4,6-Dinitro-2-methylphenol	0.662	0.0682	0.137	mg/kg dry	2	0.546	ND	121	29-132%	---	---	Q-41
2-Methylphenol	0.372	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	32-122%	---	---	
3+4-Methylphenol(s)	0.373	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	34-120%	---	---	
2-Nitrophenol	0.450	0.0273	0.0547	mg/kg dry	2	0.546	ND	82	36-123%	---	---	
4-Nitrophenol	0.426	0.0273	0.0547	mg/kg dry	2	0.546	ND	78	30-132%	---	---	
Pentachlorophenol (PCP)	0.464	0.0273	0.0547	mg/kg dry	2	0.546	ND	85	25-133%	---	---	
Phenol	0.382	0.00547	0.0109	mg/kg dry	2	0.546	ND	70	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.480	0.0137	0.0273	mg/kg dry	2	0.546	ND	88	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.506	0.0137	0.0273	mg/kg dry	2	0.546	ND	93	40-120%	---	---	Q-41
2,4,5-Trichlorophenol	0.460	0.0137	0.0273	mg/kg dry	2	0.546	ND	84	41-124%	---	---	
2,4,6-Trichlorophenol	0.439	0.0137	0.0273	mg/kg dry	2	0.546	ND	80	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.449	0.0410	0.0820	mg/kg dry	2	0.546	ND	82	51-133%	---	---	
Butyl benzyl phthalate	0.431	0.0273	0.0547	mg/kg dry	2	0.546	ND	79	48-132%	---	---	
Diethylphthalate	0.490	0.0273	0.0547	mg/kg dry	2	0.546	ND	90	50-124%	---	---	
Dimethylphthalate	0.465	0.0273	0.0547	mg/kg dry	2	0.546	ND	85	48-124%	---	---	
Di-n-butylphthalate	0.419	0.0273	0.0547	mg/kg dry	2	0.546	ND	77	51-128%	---	---	
Di-n-octyl phthalate	0.480	0.0273	0.0547	mg/kg dry	2	0.546	ND	88	44-140%	---	---	
N-Nitrosodimethylamine	0.312	0.00682	0.0137	mg/kg drv	2	0.546	ND	57	23-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Matrix Spike (9071408-MS2)			Prepared: 07/30/19 13:20		Analyzed: 07/31/19 21:51							
QC Source Sample: Non-SDG (A9G0922-02RE2)												
N-Nitroso-di-n-propylamine	0.334	0.00682	0.0137	mg/kg dry	2	0.546	ND	61	36-120%	---	---	
N-Nitrosodiphenylamine	0.425	0.00682	0.0137	mg/kg dry	2	0.546	ND	78	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.358	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.355	0.00682	0.0137	mg/kg dry	2	0.546	ND	65	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.323	0.00682	0.0137	mg/kg dry	2	0.546	ND	59	33-131%	---	---	
Hexachlorobenzene	0.432	0.00273	0.00547	mg/kg dry	2	0.546	ND	79	44-122%	---	---	
Hexachlorobutadiene	0.419	0.00682	0.0137	mg/kg dry	2	0.546	ND	77	32-123%	---	---	
Hexachlorocyclopentadiene	0.408	0.0137	0.0273	mg/kg dry	2	0.546	ND	75	5-140%	---	---	Q-41
Hexachloroethane	0.362	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	28-120%	---	---	
2-Chloronaphthalene	0.377	0.00273	0.00547	mg/kg dry	2	0.546	ND	69	41-120%	---	---	
1,2-Dichlorobenzene	0.370	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	33-120%	---	---	
1,3-Dichlorobenzene	0.363	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	30-120%	---	---	
1,4-Dichlorobenzene	0.370	0.00682	0.0137	mg/kg dry	2	0.546	ND	68	31-120%	---	---	
1,2,4-Trichlorobenzene	0.401	0.00682	0.0137	mg/kg dry	2	0.546	ND	73	34-120%	---	---	
4-Bromophenyl phenyl ether	0.424	0.00682	0.0137	mg/kg dry	2	0.546	ND	78	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.462	0.00682	0.0137	mg/kg dry	2	0.546	ND	85	45-121%	---	---	
Aniline	0.315	0.0137	0.0273	mg/kg dry	2	0.546	ND	58	7-120%	---	---	
4-Chloroaniline	0.363	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	16-120%	---	---	
2-Nitroaniline	0.463	0.0547	0.109	mg/kg dry	2	0.546	ND	85	44-127%	---	---	
3-Nitroaniline	0.441	0.0547	0.109	mg/kg dry	2	0.546	ND	81	33-120%	---	---	
4-Nitroaniline	0.496	0.0547	0.109	mg/kg dry	2	0.546	ND	91	35-120%	---	---	
Nitrobenzene	0.363	0.0273	0.0547	mg/kg dry	2	0.546	ND	66	34-122%	---	---	
2,4-Dinitrotoluene	0.517	0.0273	0.0547	mg/kg dry	2	0.546	ND	95	48-126%	---	---	Q-41
2,6-Dinitrotoluene	0.484	0.0273	0.0547	mg/kg dry	2	0.546	ND	88	46-124%	---	---	
Benzoic acid	0.526	0.342	0.342	mg/kg dry	2	1.09	ND	48	5-140%	---	---	
Benzyl alcohol	0.359	0.0137	0.0273	mg/kg dry	2	0.546	ND	66	29-122%	---	---	
Isophorone	0.348	0.00682	0.0137	mg/kg dry	2	0.546	ND	64	30-122%	---	---	
Azobenzene (1,2-DPH)	0.363	0.00682	0.0137	mg/kg dry	2	0.546	ND	66	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.405	0.0682	0.137	mg/kg dry	2	0.546	ND	74	60-121%	---	---	
3,3'-Dichlorobenzidine	0.891	0.0547	0.109	mg/kg dry	2	1.09	ND	82	22-121%	---	---	Q-41
1,2-Dinitrobenzene	0.492	0.0682	0.137	mg/kg dry	2	0.546	ND	90	44-120%	---	---	Q-41
1,3-Dinitrobenzene	0.512	0.0682	0.137	mg/kg dry	2	0.546	ND	94	42-127%	---	---	Q-41
1,4-Dinitrobenzene	0.551	0.0682	0.137	mg/kg dry	2	0.546	ND	101	37-132%	---	---	Q-41

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071408 - EPA 3546						Soil						
Matrix Spike (9071408-MS2)			Prepared: 07/30/19 13:20 Analyzed: 07/31/19 21:51									
QC Source Sample: Non-SDG (A9G0922-02RE2)												
Pyridine	0.235	0.0137	0.0273	mg/kg dry	2	0.546	ND	43	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery:		69 %	Limits:	37-122 %	Dilution:		2x			
2-Fluorobiphenyl (Surr)				75 %	44-115 %				"			
Phenol-d6 (Surr)				71 %	33-122 %				"			
p-Terphenyl-d14 (Surr)				86 %	54-127 %				"			
2-Fluorophenol (Surr)				70 %	35-115 %				"			
2,4,6-Tribromophenol (Surr)				102 %	39-132 %				"			

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Project Number: [none]

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QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Blank (9080555-BLK2)			Prepared: 08/01/19 15:37 Analyzed: 08/01/19 22:33									
EPA 8270D												
Acenaphthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	0.00188	0.00375	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Phenol	ND	0.00250	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Blank (9080555-BLK2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 22:33							
2,3,5,6-Tetrachlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.0188	0.0375	mg/kg wet	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00125	0.00250	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Aniline	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0125	0.0250	mg/kg wet	1	---	---	---	---	---	---	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Blank (9080555-BLK2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 22:33							
Benzoic acid	ND	0.157	0.312	mg/kg wet	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Isophorone	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.00312	0.00625	mg/kg wet	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.0250	0.0500	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.0312	0.0625	mg/kg wet	1	---	---	---	---	---	---	
Pyridine	ND	0.00625	0.0125	mg/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 64 %		Limits: 37-122 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		70 %		44-115 %		"						
Phenol-d6 (Surr)		66 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		83 %		54-127 %		"						
2-Fluorophenol (Surr)		64 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		85 %		39-132 %		"						
LCS (9080555-BS2)						Prepared: 08/01/19 15:37		Analyzed: 08/01/19 23:08				
EPA 8270D												
Acenaphthene	0.425	0.00532	0.0107	mg/kg wet	4	0.533	---	80	40-122%	---	---	
Acenaphthylene	0.447	0.00532	0.0107	mg/kg wet	4	0.533	---	84	32-132%	---	---	
Anthracene	0.453	0.00532	0.0107	mg/kg wet	4	0.533	---	85	47-123%	---	---	
Benz(a)anthracene	0.451	0.00532	0.0107	mg/kg wet	4	0.533	---	85	49-126%	---	---	
Benzo(a)pyrene	0.479	0.00800	0.0160	mg/kg wet	4	0.533	---	90	45-129%	---	---	
Benzo(b)fluoranthene	0.465	0.00800	0.0160	mg/kg wet	4	0.533	---	87	45-132%	---	---	
Benzo(k)fluoranthene	0.475	0.00800	0.0160	mg/kg wet	4	0.533	---	89	47-132%	---	---	
Benzo(g,h,i)perylene	0.465	0.00532	0.0107	mg/kg wet	4	0.533	---	87	43-134%	---	---	
Chrysene	0.463	0.00532	0.0107	mg/kg wet	4	0.533	---	87	50-124%	---	---	
Dibenz(a,h)anthracene	0.449	0.00532	0.0107	mg/kg wet	4	0.533	---	84	45-134%	---	---	
Fluoranthene	0.471	0.00532	0.0107	mg/kg wet	4	0.533	---	88	50-127%	---	---	
Fluorene	0.431	0.00532	0.0107	mg/kg wet	4	0.533	---	81	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.427	0.00532	0.0107	mg/kg wet	4	0.533	---	80	45-133%	---	---	
1-Methylnaphthalene	0.409	0.0107	0.0213	mg/kg wet	4	0.533	---	77	40-120%	---	---	
2-Methylnaphthalene	0.422	0.0107	0.0213	mg/kg wet	4	0.533	---	79	38-122%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
LCS (9080555-BS2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 23:08							
Naphthalene	0.416	0.0107	0.0213	mg/kg wet	4	0.533	---	78	35-123%	---	---	
Phenanthrene	0.438	0.00532	0.0107	mg/kg wet	4	0.533	---	82	50-121%	---	---	
Pyrene	0.478	0.00532	0.0107	mg/kg wet	4	0.533	---	90	47-127%	---	---	
Carbazole	0.480	0.00800	0.0160	mg/kg wet	4	0.533	---	90	50-122%	---	---	
Dibenzofuran	0.435	0.00532	0.0107	mg/kg wet	4	0.533	---	82	44-120%	---	---	
4-Chloro-3-methylphenol	0.435	0.0532	0.107	mg/kg wet	4	0.533	---	82	45-122%	---	---	
2-Chlorophenol	0.408	0.0267	0.0532	mg/kg wet	4	0.533	---	76	34-121%	---	---	
2,4-Dichlorophenol	0.486	0.0267	0.0532	mg/kg wet	4	0.533	---	91	40-122%	---	---	
2,4-Dimethylphenol	0.452	0.0267	0.0532	mg/kg wet	4	0.533	---	85	30-127%	---	---	
2,4-Dinitrophenol	0.450	0.133	0.267	mg/kg wet	4	0.533	---	84	5-137%	---	---	
4,6-Dinitro-2-methylphenol	0.517	0.133	0.267	mg/kg wet	4	0.533	---	97	29-132%	---	---	
2-Methylphenol	0.407	0.0133	0.0267	mg/kg wet	4	0.533	---	76	32-122%	---	---	
3+4-Methylphenol(s)	0.432	0.0133	0.0267	mg/kg wet	4	0.533	---	81	34-120%	---	---	
2-Nitrophenol	0.422	0.0532	0.107	mg/kg wet	4	0.533	---	79	36-123%	---	---	
4-Nitrophenol	0.448	0.0532	0.107	mg/kg wet	4	0.533	---	84	30-132%	---	---	
Pentachlorophenol (PCP)	0.473	0.0532	0.107	mg/kg wet	4	0.533	---	89	25-133%	---	---	
Phenol	0.387	0.0107	0.0213	mg/kg wet	4	0.533	---	73	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.453	0.0267	0.0532	mg/kg wet	4	0.533	---	85	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.439	0.0267	0.0532	mg/kg wet	4	0.533	---	82	40-120%	---	---	
2,4,5-Trichlorophenol	0.464	0.0267	0.0532	mg/kg wet	4	0.533	---	87	41-124%	---	---	
2,4,6-Trichlorophenol	0.466	0.0267	0.0532	mg/kg wet	4	0.533	---	87	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.464	0.0800	0.160	mg/kg wet	4	0.533	---	87	51-133%	---	---	
Butyl benzyl phthalate	0.452	0.0532	0.107	mg/kg wet	4	0.533	---	85	48-132%	---	---	
Diethylphthalate	0.454	0.0532	0.107	mg/kg wet	4	0.533	---	85	50-124%	---	---	
Dimethylphthalate	0.431	0.0532	0.107	mg/kg wet	4	0.533	---	81	48-124%	---	---	
Di-n-butylphthalate	0.483	0.0532	0.107	mg/kg wet	4	0.533	---	91	51-128%	---	---	
Di-n-octyl phthalate	0.468	0.0532	0.107	mg/kg wet	4	0.533	---	88	44-140%	---	---	
N-Nitrosodimethylamine	0.382	0.0133	0.0267	mg/kg wet	4	0.533	---	72	23-120%	---	---	
N-Nitroso-di-n-propylamine	0.375	0.0133	0.0267	mg/kg wet	4	0.533	---	70	36-120%	---	---	
N-Nitrosodiphenylamine	0.463	0.0133	0.0267	mg/kg wet	4	0.533	---	87	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.446	0.0133	0.0267	mg/kg wet	4	0.533	---	84	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.365	0.0133	0.0267	mg/kg wet	4	0.533	---	68	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.345	0.0133	0.0267	mg/kg wet	4	0.533	---	65	33-131%	---	---	
Hexachlorobenzene	0.434	0.00532	0.0107	mg/kg wet	4	0.533	---	81	44-122%	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
LCS (9080555-BS2)			Prepared: 08/01/19 15:37		Analyzed: 08/01/19 23:08							
Hexachlorobutadiene	0.409	0.0133	0.0267	mg/kg wet	4	0.533	---	77	32-123%	---	---	Q-41
Hexachlorocyclopentadiene	0.467	0.0267	0.0532	mg/kg wet	4	0.533	---	88	5-140%	---	---	
Hexachloroethane	0.416	0.0133	0.0267	mg/kg wet	4	0.533	---	78	28-120%	---	---	
2-Chloronaphthalene	0.434	0.00532	0.0107	mg/kg wet	4	0.533	---	81	41-120%	---	---	
1,2-Dichlorobenzene	0.380	0.0133	0.0267	mg/kg wet	4	0.533	---	71	33-120%	---	---	
1,3-Dichlorobenzene	0.386	0.0133	0.0267	mg/kg wet	4	0.533	---	72	30-120%	---	---	
1,4-Dichlorobenzene	0.396	0.0133	0.0267	mg/kg wet	4	0.533	---	74	31-120%	---	---	
1,2,4-Trichlorobenzene	0.430	0.0133	0.0267	mg/kg wet	4	0.533	---	81	34-120%	---	---	
4-Bromophenyl phenyl ether	0.440	0.0133	0.0267	mg/kg wet	4	0.533	---	83	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.435	0.0133	0.0267	mg/kg wet	4	0.533	---	81	45-121%	---	---	
Aniline	0.290	0.0267	0.0532	mg/kg wet	4	0.533	---	54	7-120%	---	---	
4-Chloroaniline	0.353	0.0133	0.0267	mg/kg wet	4	0.533	---	66	16-120%	---	---	
2-Nitroaniline	0.435	0.107	0.213	mg/kg wet	4	0.533	---	82	44-127%	---	---	
3-Nitroaniline	0.342	0.107	0.213	mg/kg wet	4	0.533	---	64	33-120%	---	---	
4-Nitroaniline	0.473	0.107	0.213	mg/kg wet	4	0.533	---	89	35-120%	---	---	
Nitrobenzene	0.374	0.0532	0.107	mg/kg wet	4	0.533	---	70	34-122%	---	---	
2,4-Dinitrotoluene	0.458	0.0532	0.107	mg/kg wet	4	0.533	---	86	48-126%	---	---	
2,6-Dinitrotoluene	0.460	0.0532	0.107	mg/kg wet	4	0.533	---	86	46-124%	---	---	
Benzoic acid	0.601	0.400	1.33	mg/kg wet	4	1.07	---	56	5-140%	---	---	J
Benzyl alcohol	0.387	0.0267	0.0532	mg/kg wet	4	0.533	---	72	29-122%	---	---	
Isophorone	0.414	0.0133	0.0267	mg/kg wet	4	0.533	---	78	30-122%	---	---	
Azobenzene (1,2-DPH)	0.428	0.0133	0.0267	mg/kg wet	4	0.533	---	80	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.446	0.133	0.267	mg/kg wet	4	0.533	---	84	60-121%	---	---	Q-41
3,3'-Dichlorobenzidine	2.15	0.107	0.213	mg/kg wet	4	1.07	---	201	22-121%	---	---	
1,2-Dinitrobenzene	0.441	0.133	0.267	mg/kg wet	4	0.533	---	83	44-120%	---	---	
1,3-Dinitrobenzene	0.436	0.133	0.267	mg/kg wet	4	0.533	---	82	42-127%	---	---	
1,4-Dinitrobenzene	0.426	0.133	0.267	mg/kg wet	4	0.533	---	80	37-132%	---	---	
Pyridine	0.288	0.0267	0.0532	mg/kg wet	4	0.533	---	54	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 63 %		Limits: 37-122 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		76 %		44-115 %		"						
Phenol-d6 (Surr)		69 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		84 %		54-127 %		"						
2-Fluorophenol (Surr)		68 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		86 %		39-132 %		"						

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Duplicate (9080555-DUP3)												
QC Source Sample: DP-2(21-22.5) (A9G0676-08RE1)												
EPA 8270D												
Acenaphthene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Acenaphthylene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Anthracene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Chrysene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Fluoranthene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Fluorene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	0.0286	0.0571	mg/kg dry	10	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	0.0286	0.0571	mg/kg dry	10	---	ND	---	---	---	30%	
Naphthalene	ND	0.0286	0.0571	mg/kg dry	10	---	ND	---	---	---	30%	
Phenanthrene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Pyrene	ND	0.0143	0.0286	mg/kg dry	10	---	0.0169	---	---	***	30%	Q-05
Carbazole	ND	0.0214	0.0429	mg/kg dry	10	---	ND	---	---	---	30%	
Dibenzofuran	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
2-Chlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Methylphenol	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
3+4-Methylphenol(s)	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Nitrophenol	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
4-Nitrophenol	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Duplicate (9080555-DUP3)			Prepared: 08/01/19 15:37		Analyzed: 08/02/19 11:06							
QC Source Sample: DP-2(21-22.5) (A9G0676-08RE1)												
Phenol	ND	0.0286	0.0571	mg/kg dry	10	---	0.0302	---	---	***	30%	Q-05
2,3,4,6-Tetrachlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	0.214	0.429	mg/kg dry	10	---	0.250	---	---	***	30%	Q-05
Butyl benzyl phthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Diethylphthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Dimethylphthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-Chloroethoxy) methane	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
Hexachloroethane	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	0.0143	0.0286	mg/kg dry	10	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
Aniline	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%	
4-Chloroaniline	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%	
2-Nitroaniline	ND	0.286	0.571	mg/kg dry	10	---	ND	---	---	---	30%	
3-Nitroaniline	ND	0.286	0.571	mg/kg dry	10	---	ND	---	---	---	30%	
4-Nitroaniline	ND	0.286	0.571	mg/kg drv	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 9080555 - EPA 3546						Soil							
Duplicate (9080555-DUP3)			Prepared: 08/01/19 15:37 Analyzed: 08/02/19 11:06										
QC Source Sample: DP-2(21-22.5) (A9G0676-08RE1)													
Nitrobenzene	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%		
2,4-Dinitrotoluene	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%		
2,6-Dinitrotoluene	ND	0.143	0.286	mg/kg dry	10	---	ND	---	---	---	30%		
Benzoic acid	ND	1.79	3.57	mg/kg dry	10	---	ND	---	---	---	30%		
Benzyl alcohol	0.159	0.0715	0.143	mg/kg dry	10	---	1.07	---	---	148	30%	Q-04	
Isophorone	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%		
Azobenzene (1,2-DPH)	ND	0.0357	0.0715	mg/kg dry	10	---	ND	---	---	---	30%		
Bis(2-Ethylhexyl) adipate	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%		
3,3'-Dichlorobenzidine	ND	0.286	0.571	mg/kg dry	10	---	ND	---	---	---	30%	Q-52	
1,2-Dinitrobenzene	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%		
1,3-Dinitrobenzene	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%		
1,4-Dinitrobenzene	ND	0.357	0.715	mg/kg dry	10	---	ND	---	---	---	30%		
Pyridine	ND	0.0715	0.143	mg/kg dry	10	---	ND	---	---	---	30%		
Surr: Nitrobenzene-d5 (Surr)		Recovery: 31 %		Limits: 37-122 %		Dilution: 10x							S-03
2-Fluorobiphenyl (Surr)		36 %		44-115 %		"							S-03
Phenol-d6 (Surr)		31 %		33-122 %		"							S-03
p-Terphenyl-d14 (Surr)		74 %		54-127 %		"							
2-Fluorophenol (Surr)		33 %		35-115 %		"							S-03
2,4,6-Tribromophenol (Surr)		73 %		39-132 %		"							

Matrix Spike (9080555-MS2)

Prepared: 08/01/19 15:37 Analyzed: 08/02/19 12:54

QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)**EPA 8270D**

Acenaphthene	0.479	0.00573	0.0115	mg/kg dry	4	0.575	ND	83	40-122%	---	---	
Acenaphthylene	0.504	0.00573	0.0115	mg/kg dry	4	0.575	ND	88	32-132%	---	---	
Anthracene	0.493	0.00573	0.0115	mg/kg dry	4	0.575	ND	86	47-123%	---	---	
Benz(a)anthracene	0.495	0.00573	0.0115	mg/kg dry	4	0.575	ND	86	49-126%	---	---	
Benzo(a)pyrene	0.512	0.00862	0.0172	mg/kg dry	4	0.575	ND	89	45-129%	---	---	
Benzo(b)fluoranthene	0.495	0.00862	0.0172	mg/kg dry	4	0.575	ND	86	45-132%	---	---	
Benzo(k)fluoranthene	0.512	0.00862	0.0172	mg/kg dry	4	0.575	ND	89	47-132%	---	---	
Benzo(g,h,i)perylene	0.493	0.00573	0.0115	mg/kg dry	4	0.575	ND	86	43-134%	---	---	
Chrysene	0.500	0.00573	0.0115	mg/kg dry	4	0.575	ND	87	50-124%	---	---	
Dibenz(a,h)anthracene	0.484	0.00573	0.0115	mg/kg dry	4	0.575	ND	84	45-134%	---	---	

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Matrix Spike (9080555-MS2)			Prepared: 08/01/19 15:37 Analyzed: 08/02/19 12:54									
QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)												
Fluoranthene	0.521	0.00573	0.0115	mg/kg dry	4	0.575	ND	91	50-127%	---	---	
Fluorene	0.483	0.00573	0.0115	mg/kg dry	4	0.575	ND	84	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.460	0.00573	0.0115	mg/kg dry	4	0.575	ND	80	45-133%	---	---	
1-Methylnaphthalene	0.459	0.0115	0.0230	mg/kg dry	4	0.575	ND	80	40-120%	---	---	
2-Methylnaphthalene	0.477	0.0115	0.0230	mg/kg dry	4	0.575	ND	83	38-122%	---	---	
Naphthalene	0.467	0.0115	0.0230	mg/kg dry	4	0.575	ND	81	35-123%	---	---	
Phenanthrene	0.499	0.00573	0.0115	mg/kg dry	4	0.575	ND	87	50-121%	---	---	
Pyrene	0.538	0.00573	0.0115	mg/kg dry	4	0.575	0.00640	92	47-127%	---	---	
Carbazole	0.521	0.00862	0.0172	mg/kg dry	4	0.575	ND	91	50-122%	---	---	
Dibenzofuran	0.479	0.00573	0.0115	mg/kg dry	4	0.575	ND	83	44-120%	---	---	
4-Chloro-3-methylphenol	0.483	0.0573	0.115	mg/kg dry	4	0.575	ND	84	45-122%	---	---	
2-Chlorophenol	0.449	0.0287	0.0573	mg/kg dry	4	0.575	ND	78	34-121%	---	---	
2,4-Dichlorophenol	0.535	0.0287	0.0573	mg/kg dry	4	0.575	ND	93	40-122%	---	---	
2,4-Dimethylphenol	0.445	0.0287	0.0573	mg/kg dry	4	0.575	ND	77	30-127%	---	---	
2,4-Dinitrophenol	0.402	0.144	0.287	mg/kg dry	4	0.575	ND	70	5-137%	---	---	
4,6-Dinitro-2-methylphenol	0.469	0.144	0.287	mg/kg dry	4	0.575	ND	82	29-132%	---	---	
2-Methylphenol	0.447	0.0144	0.0287	mg/kg dry	4	0.575	ND	78	32-122%	---	---	
3+4-Methylphenol(s)	0.463	0.0144	0.0287	mg/kg dry	4	0.575	ND	81	34-120%	---	---	
2-Nitrophenol	0.460	0.0573	0.115	mg/kg dry	4	0.575	ND	80	36-123%	---	---	
4-Nitrophenol	0.467	0.0573	0.115	mg/kg dry	4	0.575	ND	81	30-132%	---	---	
Pentachlorophenol (PCP)	0.492	0.0573	0.115	mg/kg dry	4	0.575	ND	86	25-133%	---	---	
Phenol	0.431	0.0115	0.0230	mg/kg dry	4	0.575	ND	75	34-120%	---	---	
2,3,4,6-Tetrachlorophenol	0.490	0.0287	0.0573	mg/kg dry	4	0.575	ND	85	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	0.447	0.0287	0.0573	mg/kg dry	4	0.575	ND	78	40-120%	---	---	
2,4,5-Trichlorophenol	0.523	0.0287	0.0573	mg/kg dry	4	0.575	ND	91	41-124%	---	---	
2,4,6-Trichlorophenol	0.506	0.0287	0.0573	mg/kg dry	4	0.575	ND	88	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	0.529	0.0862	0.172	mg/kg dry	4	0.575	ND	92	51-133%	---	---	
Butyl benzyl phthalate	0.503	0.0573	0.115	mg/kg dry	4	0.575	ND	88	48-132%	---	---	
Diethylphthalate	0.500	0.0573	0.115	mg/kg dry	4	0.575	ND	87	50-124%	---	---	
Dimethylphthalate	0.476	0.0573	0.115	mg/kg dry	4	0.575	ND	83	48-124%	---	---	
Di-n-butylphthalate	0.526	0.0573	0.115	mg/kg dry	4	0.575	ND	92	51-128%	---	---	
Di-n-octyl phthalate	0.526	0.0573	0.115	mg/kg dry	4	0.575	ND	91	44-140%	---	---	
N-Nitrosodimethylamine	0.427	0.0144	0.0287	mg/kg dry	4	0.575	ND	74	23-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Matrix Spike (9080555-MS2)			Prepared: 08/01/19 15:37		Analyzed: 08/02/19 12:54							
QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)												
N-Nitroso-di-n-propylamine	0.418	0.0144	0.0287	mg/kg dry	4	0.575	ND	73	36-120%	---	---	
N-Nitrosodiphenylamine	0.504	0.0144	0.0287	mg/kg dry	4	0.575	ND	88	38-127%	---	---	
Bis(2-Chloroethoxy) methane	0.499	0.0144	0.0287	mg/kg dry	4	0.575	ND	87	36-121%	---	---	
Bis(2-Chloroethyl) ether	0.411	0.0144	0.0287	mg/kg dry	4	0.575	ND	72	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	0.396	0.0144	0.0287	mg/kg dry	4	0.575	ND	69	33-131%	---	---	
Hexachlorobenzene	0.491	0.00573	0.0115	mg/kg dry	4	0.575	ND	85	44-122%	---	---	
Hexachlorobutadiene	0.469	0.0144	0.0287	mg/kg dry	4	0.575	ND	82	32-123%	---	---	
Hexachlorocyclopentadiene	0.495	0.0287	0.0573	mg/kg dry	4	0.575	ND	86	5-140%	---	---	
Hexachloroethane	0.488	0.0144	0.0287	mg/kg dry	4	0.575	ND	85	28-120%	---	---	
2-Chloronaphthalene	0.488	0.00573	0.0115	mg/kg dry	4	0.575	ND	85	41-120%	---	---	
1,2-Dichlorobenzene	0.433	0.0144	0.0287	mg/kg dry	4	0.575	ND	75	33-120%	---	---	
1,3-Dichlorobenzene	0.441	0.0144	0.0287	mg/kg dry	4	0.575	ND	77	30-120%	---	---	
1,4-Dichlorobenzene	0.444	0.0144	0.0287	mg/kg dry	4	0.575	ND	77	31-120%	---	---	
1,2,4-Trichlorobenzene	0.487	0.0144	0.0287	mg/kg dry	4	0.575	ND	85	34-120%	---	---	
4-Bromophenyl phenyl ether	0.492	0.0144	0.0287	mg/kg dry	4	0.575	ND	86	46-124%	---	---	
4-Chlorophenyl phenyl ether	0.490	0.0144	0.0287	mg/kg dry	4	0.575	ND	85	45-121%	---	---	
Aniline	0.318	0.0287	0.0573	mg/kg dry	4	0.575	ND	55	7-120%	---	---	
4-Chloroaniline	0.383	0.0144	0.0287	mg/kg dry	4	0.575	ND	67	16-120%	---	---	
2-Nitroaniline	0.495	0.115	0.230	mg/kg dry	4	0.575	ND	86	44-127%	---	---	
3-Nitroaniline	0.375	0.115	0.230	mg/kg dry	4	0.575	ND	65	33-120%	---	---	
4-Nitroaniline	0.465	0.115	0.230	mg/kg dry	4	0.575	ND	81	35-120%	---	---	
Nitrobenzene	0.419	0.0573	0.115	mg/kg dry	4	0.575	ND	73	34-122%	---	---	
2,4-Dinitrotoluene	0.514	0.0573	0.115	mg/kg dry	4	0.575	ND	89	48-126%	---	---	
2,6-Dinitrotoluene	0.522	0.0573	0.115	mg/kg dry	4	0.575	ND	91	46-124%	---	---	
Benzoic acid	0.580	0.431	0.431	mg/kg dry	4	1.15	ND	50	5-140%	---	---	
Benzyl alcohol	0.432	0.0287	0.0573	mg/kg dry	4	0.575	ND	75	29-122%	---	---	
Isophorone	0.465	0.0144	0.0287	mg/kg dry	4	0.575	ND	81	30-122%	---	---	
Azobenzene (1,2-DPH)	0.479	0.0144	0.0287	mg/kg dry	4	0.575	ND	83	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	0.515	0.144	0.287	mg/kg dry	4	0.575	ND	90	60-121%	---	---	
3,3'-Dichlorobenzidine	1.81	0.115	0.230	mg/kg dry	4	1.15	ND	158	22-121%	---	---	Q-01, Q-41
1,2-Dinitrobenzene	0.475	0.144	0.287	mg/kg dry	4	0.575	ND	83	44-120%	---	---	
1,3-Dinitrobenzene	0.477	0.144	0.287	mg/kg dry	4	0.575	ND	83	42-127%	---	---	
1,4-Dinitrobenzene	0.463	0.144	0.287	mg/kg drv	4	0.575	ND	81	37-132%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080555 - EPA 3546						Soil						
Matrix Spike (9080555-MS2)			Prepared: 08/01/19 15:37 Analyzed: 08/02/19 12:54									
QC Source Sample: DP-13(10-11.5) (A9G0676-47RE2)												
Pyridine	0.305	0.0287	0.0573	mg/kg dry	4	0.575	ND	53	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 65 %		Limits: 37-122 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		79 %		44-115 %		"						
Phenol-d6 (Surr)		72 %		33-122 %		"						
p-Terphenyl-d14 (Surr)		84 %		54-127 %		"						
2-Fluorophenol (Surr)		68 %		35-115 %		"						
2,4,6-Tribromophenol (Surr)		89 %		39-132 %		"						

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071299 - EPA 3051A						Soil						
Blank (9071299-BLK1)			Prepared: 07/25/19 14:44		Analyzed: 07/30/19 17:40							
EPA 6020A												
Antimony	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	0.0385	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Nickel	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	1.92	3.85	mg/kg wet	10	---	---	---	---	---	---	

LCS (9071299-BS1)

Prepared: 07/25/19 14:44 Analyzed: 07/30/19 17:59

EPA 6020A												
Antimony	26.5	0.500	1.00	mg/kg wet	10	25.0	---	106	80-120%	---	---	
Arsenic	50.4	0.500	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Barium	50.8	0.500	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Beryllium	24.7	0.100	0.200	mg/kg wet	10	25.0	---	99	80-120%	---	---	
Cadmium	53.9	0.100	0.200	mg/kg wet	10	50.0	---	108	80-120%	---	---	
Chromium	50.1	0.500	1.00	mg/kg wet	10	50.0	---	100	80-120%	---	---	
Copper	50.7	0.500	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Lead	54.1	0.100	0.200	mg/kg wet	10	50.0	---	108	80-120%	---	---	
Mercury	0.987	0.0400	0.0800	mg/kg wet	10	1.00	---	99	80-120%	---	---	
Nickel	49.7	0.500	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Selenium	25.2	0.500	1.00	mg/kg wet	10	25.0	---	101	80-120%	---	---	
Silver	26.8	0.100	0.200	mg/kg wet	10	25.0	---	107	80-120%	---	---	
Thallium	25.7	0.100	0.200	mg/kg wet	10	25.0	---	103	80-120%	---	---	
Zinc	50.0	2.00	4.00	mg/kg wet	10	50.0	---	100	80-120%	---	---	

Duplicate (9071299-DUP1)

Prepared: 07/25/19 14:44 Analyzed: 07/30/19 18:21

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****QUALITY CONTROL (QC) SAMPLE RESULTS****Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071299 - EPA 3051A						Soil						
Duplicate (9071299-DUP1)			Prepared: 07/25/19 14:44 Analyzed: 07/30/19 18:21									
QC Source Sample: DP-2(11-12.5) (A9G0676-06)												
EPA 6020A												
Antimony	ND	0.594	1.19	mg/kg dry	10	---	ND	---	---	---	40%	
Arsenic	2.64	0.594	1.19	mg/kg dry	10	---	2.56	---	---	3	40%	
Barium	66.5	0.594	1.19	mg/kg dry	10	---	61.4	---	---	8	40%	
Beryllium	0.229	0.119	0.237	mg/kg dry	10	---	0.251	---	---	9	40%	
Cadmium	0.352	0.119	0.237	mg/kg dry	10	---	0.357	---	---	1	40%	
Chromium	8.99	0.594	1.19	mg/kg dry	10	---	9.23	---	---	3	40%	
Copper	12.0	0.594	1.19	mg/kg dry	10	---	12.4	---	---	4	40%	
Lead	2.94	0.119	0.237	mg/kg dry	10	---	2.17	---	---	30	40%	
Mercury	ND	0.0475	0.0950	mg/kg dry	10	---	ND	---	---	---	40%	
Nickel	13.2	0.594	1.19	mg/kg dry	10	---	14.5	---	---	9	40%	
Selenium	ND	0.594	1.19	mg/kg dry	10	---	ND	---	---	---	40%	
Silver	ND	0.119	0.237	mg/kg dry	10	---	ND	---	---	---	40%	
Thallium	ND	0.119	0.237	mg/kg dry	10	---	ND	---	---	---	40%	
Zinc	33.7	2.37	4.75	mg/kg dry	10	---	35.0	---	---	4	40%	

Matrix Spike (9071299-MS1)

Prepared: 07/25/19 14:44 Analyzed: 07/30/19 18:26

QC Source Sample: DP-2(11-12.5) (A9G0676-06)

EPA 6020A												
Antimony	24.3	0.533	1.07	mg/kg dry	10	26.7	ND	91	75-125%	---	---	
Arsenic	53.8	0.533	1.07	mg/kg dry	10	53.3	2.56	96	75-125%	---	---	
Barium	147	0.533	1.07	mg/kg dry	10	53.3	61.4	161	75-125%	---	---	A-01b, Q-01
Beryllium	26.0	0.107	0.213	mg/kg dry	10	26.7	0.251	97	75-125%	---	---	
Cadmium	55.1	0.107	0.213	mg/kg dry	10	53.3	0.357	103	75-125%	---	---	
Chromium	60.2	0.533	1.07	mg/kg dry	10	53.3	9.23	96	75-125%	---	---	
Copper	64.2	0.533	1.07	mg/kg dry	10	53.3	12.4	97	75-125%	---	---	
Lead	56.4	0.107	0.213	mg/kg dry	10	53.3	2.17	102	75-125%	---	---	
Mercury	0.994	0.0427	0.0853	mg/kg dry	10	1.07	ND	93	75-125%	---	---	
Nickel	65.7	0.533	1.07	mg/kg dry	10	53.3	14.5	96	75-125%	---	---	
Selenium	24.6	0.533	1.07	mg/kg dry	10	26.7	ND	92	75-125%	---	---	
Silver	27.0	0.107	0.213	mg/kg dry	10	26.7	ND	101	75-125%	---	---	
Thallium	25.4	0.107	0.213	mg/kg dry	10	26.7	ND	95	75-125%	---	---	
Zinc	83.9	2.13	4.27	mg/kg dry	10	53.3	35.0	92	75-125%	---	---	

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9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071299 - EPA 3051A							Soil					

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081214 - EPA 3051A						Soil						
Blank (9081214-BLK1)			Prepared: 08/21/19 13:08		Analyzed: 08/22/19 19:34							
EPA 6020A												
Antimony	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	0.0385	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Nickel	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	1.92	3.85	mg/kg wet	10	---	---	---	---	---	---	

LCS (9081214-BS1)				Prepared: 08/21/19 13:08 Analyzed: 08/22/19 19:42							
EPA 6020A											
Antimony	26.9	0.500	1.00	mg/kg wet	10	25.0	---	108	80-120%	---	---
Arsenic	52.5	0.500	1.00	mg/kg wet	10	50.0	---	105	80-120%	---	---
Beryllium	26.6	0.100	0.200	mg/kg wet	10	25.0	---	106	80-120%	---	---
Cadmium	53.2	0.100	0.200	mg/kg wet	10	50.0	---	106	80-120%	---	---
Chromium	51.6	0.500	1.00	mg/kg wet	10	50.0	---	103	80-120%	---	---
Copper	55.6	0.500	1.00	mg/kg wet	10	50.0	---	111	80-120%	---	---
Lead	53.2	0.100	0.200	mg/kg wet	10	50.0	---	106	80-120%	---	---
Mercury	1.05	0.0400	0.0800	mg/kg wet	10	1.00	---	105	80-120%	---	---
Nickel	55.9	0.500	1.00	mg/kg wet	10	50.0	---	112	80-120%	---	---
Selenium	25.8	0.500	1.00	mg/kg wet	10	25.0	---	103	80-120%	---	---
Silver	28.2	0.100	0.200	mg/kg wet	10	25.0	---	113	80-120%	---	---
Thallium	26.6	0.100	0.200	mg/kg wet	10	25.0	---	106	80-120%	---	---
Zinc	54.9	2.00	4.00	mg/kg wet	10	50.0	---	110	80-120%	---	---

Duplicate (9081214-DUP1)				Prepared: 08/21/19 13:08 Analyzed: 08/22/19 20:04							
<u>QC Source Sample: Non-SDG (A9H0576-16)</u>											
Antimony	ND	0.601	1.20	mg/kg dry	10	---	ND	---	---	---	40%

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Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

QUALITY CONTROL (QC) SAMPLE RESULTS**Total Metals by EPA 6020A (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081214 - EPA 3051A						Soil						
Duplicate (9081214-DUP1)			Prepared: 08/21/19 13:08 Analyzed: 08/22/19 20:04									
QC Source Sample: Non-SDG (A9H0576-16)												
Arsenic	8.37	0.601	1.20	mg/kg dry	10	---	7.33	---	---	13	40%	
Beryllium	0.242	0.120	0.241	mg/kg dry	10	---	0.237	---	---	2	40%	
Cadmium	ND	0.120	0.241	mg/kg dry	10	---	ND	---	---	---	40%	
Chromium	28.6	0.601	1.20	mg/kg dry	10	---	24.9	---	---	14	40%	
Copper	39.6	0.601	1.20	mg/kg dry	10	---	33.6	---	---	16	40%	
Lead	10.2	0.120	0.241	mg/kg dry	10	---	10.1	---	---	0.8	40%	
Mercury	0.0927	0.0481	0.0962	mg/kg dry	10	---	0.0979	---	---	5	40%	
Nickel	31.4	0.601	1.20	mg/kg dry	10	---	23.1	---	---	30	40%	
Selenium	ND	0.601	1.20	mg/kg dry	10	---	ND	---	---	---	40%	
Silver	ND	0.120	0.241	mg/kg dry	10	---	ND	---	---	---	40%	
Thallium	ND	0.120	0.241	mg/kg dry	10	---	ND	---	---	---	40%	
Zinc	48.3	2.41	4.81	mg/kg dry	10	---	47.7	---	---	1	40%	

Matrix Spike (9081214-MS1)

Prepared: 08/21/19 13:08 Analyzed: 08/22/19 20:08

QC Source Sample: Non-SDG (A9H0576-16)**EPA 6020A**

Antimony	29.0	0.607	1.21	mg/kg dry	10	30.4	ND	95	75-125%	---	---	
Arsenic	70.0	0.607	1.21	mg/kg dry	10	60.7	7.33	103	75-125%	---	---	
Beryllium	33.1	0.121	0.243	mg/kg dry	10	30.4	0.237	108	75-125%	---	---	
Cadmium	65.5	0.121	0.243	mg/kg dry	10	60.7	ND	108	75-125%	---	---	
Chromium	84.3	0.607	1.21	mg/kg dry	10	60.7	24.9	98	75-125%	---	---	
Copper	95.5	0.607	1.21	mg/kg dry	10	60.7	33.6	102	75-125%	---	---	
Lead	74.9	0.121	0.243	mg/kg dry	10	60.7	10.1	107	75-125%	---	---	
Mercury	1.39	0.0486	0.0972	mg/kg dry	10	1.21	0.0979	107	75-125%	---	---	
Nickel	87.6	0.607	1.21	mg/kg dry	10	60.7	23.1	106	75-125%	---	---	
Selenium	31.1	0.607	1.21	mg/kg dry	10	30.4	ND	102	75-125%	---	---	
Silver	34.4	0.121	0.243	mg/kg dry	10	30.4	ND	113	75-125%	---	---	
Thallium	32.3	0.121	0.243	mg/kg dry	10	30.4	ND	106	75-125%	---	---	
Zinc	109	2.43	4.86	mg/kg dry	10	60.7	47.7	101	75-125%	---	---	

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9450 SW Commerce Circle
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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9071168 - Total Solids (Dry Weight)							Soil					
Duplicate (9071168-DUP1)			Prepared: 07/23/19 08:16 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0357-06)												
% Solids	80.3	1.00	1.00	% by Weight	1	---	80.3	---	---	0.04	10%	
Duplicate (9071168-DUP2)			Prepared: 07/23/19 08:16 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0689-06)												
% Solids	88.6	1.00	1.00	% by Weight	1	---	88.8	---	---	0.1	10%	
Duplicate (9071168-DUP3)			Prepared: 07/23/19 15:51 Analyzed: 07/24/19 08:52									
QC Source Sample: DP-8(11.5-13) (A9G0676-28)												
EPA 8000C												
% Solids	92.5	1.00	1.00	% by Weight	1	---	92.4	---	---	0.1	10%	
Duplicate (9071168-DUP4)			Prepared: 07/23/19 15:51 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0703-05)												
% Solids	79.7	1.00	1.00	% by Weight	1	---	80.4	---	---	0.9	10%	
Duplicate (9071168-DUP5)			Prepared: 07/23/19 15:51 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0703-08)												
% Solids	80.1	1.00	1.00	% by Weight	1	---	80.3	---	---	0.2	10%	
Duplicate (9071168-DUP6)			Prepared: 07/23/19 19:17 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0720-04)												
% Solids	74.5	1.00	1.00	% by Weight	1	---	74.6	---	---	0.2	10%	
Duplicate (9071168-DUP7)			Prepared: 07/23/19 19:17 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0727-01)												
% Solids	84.4	1.00	1.00	% by Weight	1	---	79.8	---	---	6	10%	
Duplicate (9071168-DUP8)			Prepared: 07/23/19 19:17 Analyzed: 07/24/19 08:52									
QC Source Sample: Non-SDG (A9G0730-04)												
% Solids	80.8	1.00	1.00	% by Weight	1	---	80.0	---	---	1	10%	

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Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

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 9071168 - Total Solids (Dry Weight)							Soil					

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

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080517 - Total Solids (Dry Weight)							Soil					
Duplicate (9080517-DUP1)			Prepared: 08/01/19 08:45		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9G0972-11)												
% Solids	89.4	1.00	1.00	% by Weight	1	---	89.1	---	---	0.3	10%	
Duplicate (9080517-DUP2)			Prepared: 08/01/19 08:45		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9G0976-09)												
% Solids	88.3	1.00	1.00	% by Weight	1	---	88.4	---	---	0.1	10%	
Duplicate (9080517-DUP3)			Prepared: 08/01/19 08:45		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9G0983-08)												
% Solids	81.0	1.00	1.00	% by Weight	1	---	81.3	---	---	0.3	10%	
Duplicate (9080517-DUP4)			Prepared: 08/01/19 19:11		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9H0029-01)												
% Solids	78.4	1.00	1.00	% by Weight	1	---	78.1	---	---	0.4	10%	
Duplicate (9080517-DUP5)			Prepared: 08/01/19 19:13		Analyzed: 08/02/19 08:43							
QC Source Sample: Non-SDG (A9H0031-03)												
% Solids	79.3	1.00	1.00	% by Weight	1	---	78.9	---	---	0.5	10%	

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

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080572 - Total Solids (Dry Weight)							Soil					
Duplicate (9080572-DUP1)			Prepared: 08/02/19 08:52		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0009-02)												
% Solids	93.0	1.00	1.00	% by Weight	1	---	93.2	---	---	0.2	10%	
Duplicate (9080572-DUP2)			Prepared: 08/02/19 08:52		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0020-06)												
% Solids	74.7	1.00	1.00	% by Weight	1	---	74.4	---	---	0.4	10%	
Duplicate (9080572-DUP3)			Prepared: 08/02/19 08:52		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0037-09)												
% Solids	96.5	1.00	1.00	% by Weight	1	---	96.6	---	---	0.1	10%	
Duplicate (9080572-DUP4)			Prepared: 08/02/19 18:29		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9G0808-67)												
% Solids	95.3	1.00	1.00	% by Weight	1	---	95.4	---	---	0.1	10%	
Duplicate (9080572-DUP5)			Prepared: 08/02/19 18:29		Analyzed: 08/05/19 13:46							
QC Source Sample: Non-SDG (A9H0074-03)												
% Solids	76.7	1.00	1.00	% by Weight	1	---	76.3	---	---	0.5	10%	

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

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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 9080640 - Total Solids (Dry Weight)							Soil					
Duplicate (9080640-DUP1)			Prepared: 08/05/19 13:56		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0042-01)												
% Solids	77.5	1.00	1.00	% by Weight	1	---	77.7	---	---	0.2	10%	
Duplicate (9080640-DUP2)			Prepared: 08/05/19 13:56		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0088-01)												
% Solids	74.1	1.00	1.00	% by Weight	1	---	73.7	---	---	0.5	10%	
Duplicate (9080640-DUP4)			Prepared: 08/05/19 18:28		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0017-61)												
% Solids	96.6	1.00	1.00	% by Weight	1	---	96.2	---	---	0.5	10%	
Duplicate (9080640-DUP5)			Prepared: 08/05/19 18:28		Analyzed: 08/06/19 08:28							
QC Source Sample: Non-SDG (A9H0125-06)												
% Solids	76.2	1.00	1.00	% by Weight	1	---	74.9	---	---	2	10%	

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Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0676 - 08 29 19 1209****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 9080658 - Total Solids (Dry Weight)							Soil					
Duplicate (9080658-DUP1)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: DP-11(16.5-18) (A9G0676-40)</u>												
<u>EPA 8000C</u>												
% Solids	89.5	1.00	1.00	% by Weight	1	---	89.4	---	---	0.1	10%	
Duplicate (9080658-DUP2)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0052-10)</u>												
% Solids	89.1	1.00	1.00	% by Weight	1	---	89.0	---	---	0.1	10%	
Duplicate (9080658-DUP3)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0120-09)</u>												
% Solids	75.1	1.00	1.00	% by Weight	1	---	75.2	---	---	0.09	10%	
Duplicate (9080658-DUP4)			Prepared: 08/06/19 09:58 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0120-19)</u>												
% Solids	77.9	1.00	1.00	% by Weight	1	---	78.3	---	---	0.6	10%	
Duplicate (9080658-DUP5)			Prepared: 08/06/19 18:37 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0148-03)</u>												
% Solids	73.5	1.00	1.00	% by Weight	1	---	73.6	---	---	0.2	10%	
Duplicate (9080658-DUP6)			Prepared: 08/06/19 18:37 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0154-02)</u>												
% Solids	83.4	1.00	1.00	% by Weight	1	---	82.3	---	---	1	10%	
Duplicate (9080658-DUP7)			Prepared: 08/06/19 18:37 Analyzed: 08/07/19 08:36									
<u>QC Source Sample: Non-SDG (A9H0155-02)</u>												
% Solids	92.0	1.00	1.00	% by Weight	1	---	91.7	---	---	0.3	10%	

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EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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: 9071293							
A9G0676-02	Soil	NWTPH-Dx	07/18/19 10:32	07/25/19 12:58	10.04g/5mL	10g/5mL	1.00
A9G0676-06	Soil	NWTPH-Dx	07/18/19 11:15	07/25/19 12:58	11.33g/5mL	10g/5mL	0.88
A9G0676-08	Soil	NWTPH-Dx	07/18/19 11:35	07/25/19 12:58	11.38g/5mL	10g/5mL	0.88
A9G0676-10	Soil	NWTPH-Dx	07/18/19 12:00	07/25/19 12:58	11.08g/5mL	10g/5mL	0.90
A9G0676-13	Soil	NWTPH-Dx	07/19/19 08:25	07/25/19 12:58	11.15g/5mL	10g/5mL	0.90
A9G0676-16	Soil	NWTPH-Dx	07/19/19 08:55	07/25/19 12:58	10.17g/5mL	10g/5mL	0.98
A9G0676-20	Soil	NWTPH-Dx	07/19/19 09:20	07/25/19 12:58	11.12g/5mL	10g/5mL	0.90
A9G0676-24	Soil	NWTPH-Dx	07/19/19 09:40	07/25/19 12:58	10.35g/5mL	10g/5mL	0.97
A9G0676-28	Soil	NWTPH-Dx	07/19/19 09:58	07/25/19 12:58	10.76g/5mL	10g/5mL	0.93
A9G0676-32	Soil	NWTPH-Dx	07/19/19 10:20	07/25/19 12:58	10.32g/5mL	10g/5mL	0.97
A9G0676-35	Soil	NWTPH-Dx	07/19/19 10:35	07/25/19 12:58	11.08g/5mL	10g/5mL	0.90
A9G0676-38	Soil	NWTPH-Dx	07/19/19 10:50	07/25/19 12:58	10.15g/5mL	10g/5mL	0.99
A9G0676-42	Soil	NWTPH-Dx	07/19/19 11:15	07/25/19 12:58	10.26g/5mL	10g/5mL	0.98
A9G0676-46RE1	Soil	NWTPH-Dx	07/19/19 11:35	07/25/19 12:58	10.36g/5mL	10g/5mL	0.97
Batch: 9080541							
A9G0676-09	Soil	NWTPH-Dx	07/18/19 11:40	08/01/19 12:56	11.62g/5mL	10g/5mL	0.86
A9G0676-39	Soil	NWTPH-Dx	07/19/19 10:55	08/01/19 12:56	10.16g/5mL	10g/5mL	0.98
A9G0676-43	Soil	NWTPH-Dx	07/19/19 11:20	08/01/19 12:56	10.89g/5mL	10g/5mL	0.92
A9G0676-47	Soil	NWTPH-Dx	07/19/19 11:40	08/01/19 12:56	10.62g/5mL	10g/5mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071206							
A9G0676-02	Soil	NWTPH-Gx (MS)	07/18/19 10:32	07/18/19 10:32	5.06g/5mL	5g/5mL	0.99
A9G0676-06	Soil	NWTPH-Gx (MS)	07/18/19 11:15	07/18/19 11:15	4.76g/5mL	5g/5mL	1.05
A9G0676-08	Soil	NWTPH-Gx (MS)	07/18/19 11:35	07/18/19 11:35	5.37g/5mL	5g/5mL	0.93
A9G0676-10	Soil	NWTPH-Gx (MS)	07/18/19 12:00	07/18/19 12:00	5.17g/5mL	5g/5mL	0.97
A9G0676-13	Soil	NWTPH-Gx (MS)	07/19/19 08:25	07/19/19 08:25	5.28g/5mL	5g/5mL	0.95
A9G0676-16	Soil	NWTPH-Gx (MS)	07/19/19 08:55	07/19/19 08:55	4.64g/5mL	5g/5mL	1.08
A9G0676-20	Soil	NWTPH-Gx (MS)	07/19/19 09:20	07/19/19 09:20	5.27g/5mL	5g/5mL	0.95
A9G0676-24	Soil	NWTPH-Gx (MS)	07/19/19 09:40	07/19/19 09:40	5.57g/5mL	5g/5mL	0.90
A9G0676-28	Soil	NWTPH-Gx (MS)	07/19/19 09:58	07/19/19 09:58	4.82g/5mL	5g/5mL	1.04
A9G0676-32	Soil	NWTPH-Gx (MS)	07/19/19 10:20	07/19/19 10:20	4.67g/5mL	5g/5mL	1.07
A9G0676-42	Soil	NWTPH-Gx (MS)	07/19/19 11:15	07/19/19 11:15	5.26g/5mL	5g/5mL	0.95

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Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
A9G0676-46	Soil	NWTPH-Gx (MS)	07/19/19 11:35	07/19/19 11:35	5.21g/5mL	5g/5mL	0.96
Batch: 9071232							
A9G0676-35	Soil	NWTPH-Gx (MS)	07/19/19 10:35	07/19/19 10:35	4.9g/5mL	5g/5mL	1.02
A9G0676-38	Soil	NWTPH-Gx (MS)	07/19/19 10:50	07/19/19 10:50	4.61g/5mL	5g/5mL	1.08
Batch: 9080584							
A9G0676-39RE1	Soil	NWTPH-Gx (MS)	07/19/19 10:55	07/19/19 10:55	5.56g/5mL	5g/5mL	0.90
A9G0676-43RE1	Soil	NWTPH-Gx (MS)	07/19/19 11:20	07/19/19 11:20	4.96g/5mL	5g/5mL	1.01
A9G0676-47	Soil	NWTPH-Gx (MS)	07/19/19 11:40	07/19/19 11:40	4.32g/5mL	5g/5mL	1.16

Volatile Organic Compounds by EPA 5035A/8260C**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071206							
A9G0676-02	Soil	5035A/8260C	07/18/19 10:32	07/18/19 10:32	5.06g/5mL	5g/5mL	0.99
A9G0676-06	Soil	5035A/8260C	07/18/19 11:15	07/18/19 11:15	4.76g/5mL	5g/5mL	1.05
A9G0676-08	Soil	5035A/8260C	07/18/19 11:35	07/18/19 11:35	5.37g/5mL	5g/5mL	0.93
A9G0676-10	Soil	5035A/8260C	07/18/19 12:00	07/18/19 12:00	5.17g/5mL	5g/5mL	0.97
A9G0676-13	Soil	5035A/8260C	07/19/19 08:25	07/19/19 08:25	5.28g/5mL	5g/5mL	0.95
A9G0676-16	Soil	5035A/8260C	07/19/19 08:55	07/19/19 08:55	4.64g/5mL	5g/5mL	1.08
A9G0676-17	Soil	5035A/8260C	07/19/19 09:00	07/19/19 09:00	4.78g/5mL	5g/5mL	1.05
A9G0676-20	Soil	5035A/8260C	07/19/19 09:20	07/19/19 09:20	5.27g/5mL	5g/5mL	0.95
A9G0676-24	Soil	5035A/8260C	07/19/19 09:40	07/19/19 09:40	5.57g/5mL	5g/5mL	0.90
A9G0676-28	Soil	5035A/8260C	07/19/19 09:58	07/19/19 09:58	4.82g/5mL	5g/5mL	1.04
A9G0676-32	Soil	5035A/8260C	07/19/19 10:20	07/19/19 10:20	4.67g/5mL	5g/5mL	1.07
A9G0676-42	Soil	5035A/8260C	07/19/19 11:15	07/19/19 11:15	5.26g/5mL	5g/5mL	0.95
A9G0676-46	Soil	5035A/8260C	07/19/19 11:35	07/19/19 11:35	5.21g/5mL	5g/5mL	0.96
Batch: 9071232							
A9G0676-35	Soil	5035A/8260C	07/19/19 10:35	07/19/19 10:35	4.9g/5mL	5g/5mL	1.02
A9G0676-38	Soil	5035A/8260C	07/19/19 10:50	07/19/19 10:50	4.61g/5mL	5g/5mL	1.08
Batch: 9080523							
A9G0676-09	Soil	5035A/8260C	07/18/19 11:40	07/18/19 11:40	5.91g/5mL	5g/5mL	0.85
Batch: 9080584							
A9G0676-39RE1	Soil	5035A/8260C	07/19/19 10:55	07/19/19 10:55	5.56g/5mL	5g/5mL	0.90
A9G0676-43RE1	Soil	5035A/8260C	07/19/19 11:20	07/19/19 11:20	4.96g/5mL	5g/5mL	1.01

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****SAMPLE PREPARATION INFORMATION****Volatile Organic Compounds by EPA 5035A/8260C****Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9G0676-47	Soil	5035A/8260C	07/19/19 11:40	07/19/19 11:40	4.32g/5mL	5g/5mL	1.16

Polychlorinated Biphenyls by EPA 8082A**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071261							
A9G0676-02	Soil	EPA 8082A	07/18/19 10:32	07/25/19 07:05	10.3g/5mL	10g/5mL	0.97
A9G0676-06	Soil	EPA 8082A	07/18/19 11:15	07/25/19 07:05	10.01g/5mL	10g/5mL	1.00
A9G0676-08	Soil	EPA 8082A	07/18/19 11:35	07/25/19 07:05	10.23g/5mL	10g/5mL	0.98
A9G0676-10	Soil	EPA 8082A	07/18/19 12:00	07/25/19 07:05	10.37g/5mL	10g/5mL	0.96
A9G0676-13	Soil	EPA 8082A	07/19/19 08:25	07/25/19 07:05	10.15g/5mL	10g/5mL	0.99
A9G0676-16	Soil	EPA 8082A	07/19/19 08:55	07/25/19 07:05	10.34g/5mL	10g/5mL	0.97
A9G0676-20	Soil	EPA 8082A	07/19/19 09:20	07/25/19 07:05	10.1g/5mL	10g/5mL	0.99
A9G0676-24	Soil	EPA 8082A	07/19/19 09:40	07/25/19 07:05	10.03g/5mL	10g/5mL	1.00
A9G0676-28	Soil	EPA 8082A	07/19/19 09:58	07/25/19 07:05	10.32g/5mL	10g/5mL	0.97
A9G0676-32	Soil	EPA 8082A	07/19/19 10:20	07/25/19 07:05	10.22g/5mL	10g/5mL	0.98
A9G0676-35	Soil	EPA 8082A	07/19/19 10:35	07/25/19 07:05	10.03g/5mL	10g/5mL	1.00
A9G0676-38RE1	Soil	EPA 8082A	07/19/19 10:50	07/25/19 07:05	10.06g/5mL	10g/5mL	0.99
A9G0676-42RE1	Soil	EPA 8082A	07/19/19 11:15	07/25/19 07:05	10.13g/5mL	10g/5mL	0.99
A9G0676-46	Soil	EPA 8082A	07/19/19 11:35	07/25/19 07:05	10.08g/5mL	10g/5mL	0.99
Batch: 9081235							
A9G0676-39	Soil	EPA 8082A	07/19/19 10:55	08/22/19 06:48	10.59g/2mL	10g/2mL	0.94
A9G0676-43	Soil	EPA 8082A	07/19/19 11:20	08/22/19 06:48	10.78g/2mL	10g/2mL	0.93
A9G0676-47	Soil	EPA 8082A	07/19/19 11:40	08/22/19 06:48	10.07g/2mL	10g/2mL	0.99

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071207							
A9G0676-02	Soil	EPA 8270D (SIM)	07/18/19 10:32	07/24/19 07:01	10.14g/5mL	10g/5mL	0.99
A9G0676-06	Soil	EPA 8270D (SIM)	07/18/19 11:15	07/24/19 07:01	10.13g/5mL	10g/5mL	0.99
A9G0676-10	Soil	EPA 8270D (SIM)	07/18/19 12:00	07/24/19 07:01	10.06g/5mL	10g/5mL	0.99
A9G0676-16	Soil	EPA 8270D (SIM)	07/19/19 08:55	07/24/19 07:01	10.15g/5mL	10g/5mL	0.99

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****SAMPLE PREPARATION INFORMATION****Semivolatile Organic Compounds by EPA 8270D****Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071408							
A9G0676-35RE2	Soil	EPA 8270D	07/19/19 10:35	07/30/19 13:20	15.65g/2mL	15g/2mL	0.96
A9G0676-38	Soil	EPA 8270D	07/19/19 10:50	07/30/19 13:20	15.27g/2mL	15g/2mL	0.98
A9G0676-42	Soil	EPA 8270D	07/19/19 11:15	07/30/19 13:20	15.66g/5mL	15g/2mL	2.39
A9G0676-46	Soil	EPA 8270D	07/19/19 11:35	07/30/19 13:20	15.03g/2mL	15g/2mL	1.00
Batch: 9080555							
A9G0676-08RE1	Soil	EPA 8270D	07/18/19 11:35	08/01/19 16:17	15.22g/2mL	15g/2mL	0.99
A9G0676-09RE1	Soil	EPA 8270D	07/18/19 11:40	08/01/19 16:17	15.26g/2mL	15g/2mL	0.98
A9G0676-39RE1	Soil	EPA 8270D	07/19/19 10:55	08/01/19 16:17	15.26g/2mL	15g/2mL	0.98
A9G0676-43RE1	Soil	EPA 8270D	07/19/19 11:20	08/01/19 16:17	15.87g/2mL	15g/2mL	0.95
A9G0676-47RE2	Soil	EPA 8270D	07/19/19 11:40	08/01/19 16:17	15.59g/2mL	15g/2mL	0.96

Total Metals by EPA 6020A (ICPMS)**Prep: EPA 3051A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071299							
A9G0676-02	Soil	EPA 6020A	07/18/19 10:32	07/25/19 14:44	0.493g/50mL	0.5g/50mL	1.01
A9G0676-06	Soil	EPA 6020A	07/18/19 11:15	07/25/19 14:44	0.495g/50mL	0.5g/50mL	1.01
A9G0676-10	Soil	EPA 6020A	07/18/19 12:00	07/25/19 14:44	0.484g/50mL	0.5g/50mL	1.03
A9G0676-13	Soil	EPA 6020A	07/19/19 08:25	07/25/19 14:44	0.507g/50mL	0.5g/50mL	0.99
A9G0676-16	Soil	EPA 6020A	07/19/19 08:55	07/25/19 14:44	0.465g/50mL	0.5g/50mL	1.08
A9G0676-35	Soil	EPA 6020A	07/19/19 10:35	07/25/19 14:44	0.459g/50mL	0.5g/50mL	1.09
A9G0676-38	Soil	EPA 6020A	07/19/19 10:50	07/25/19 14:44	0.499g/50mL	0.5g/50mL	1.00
A9G0676-38RE1	Soil	EPA 6020A	07/19/19 10:50	07/25/19 14:44	0.499g/50mL	0.5g/50mL	1.00
A9G0676-42	Soil	EPA 6020A	07/19/19 11:15	07/25/19 14:44	0.5g/50mL	0.5g/50mL	1.00
A9G0676-42RE1	Soil	EPA 6020A	07/19/19 11:15	07/25/19 14:44	0.5g/50mL	0.5g/50mL	1.00
A9G0676-46	Soil	EPA 6020A	07/19/19 11:35	07/25/19 14:44	0.508g/50mL	0.5g/50mL	0.98
A9G0676-46RE1	Soil	EPA 6020A	07/19/19 11:35	07/25/19 14:44	0.508g/50mL	0.5g/50mL	0.98
Batch: 9081214							
A9G0676-39	Soil	EPA 6020A	07/19/19 10:55	08/21/19 13:08	0.468g/50mL	0.5g/50mL	1.07
A9G0676-43	Soil	EPA 6020A	07/19/19 11:20	08/21/19 13:08	0.489g/50mL	0.5g/50mL	1.02
A9G0676-47	Soil	EPA 6020A	07/19/19 11:40	08/21/19 13:08	0.471g/50mL	0.5g/50mL	1.06

Percent Dry Weight

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:**A9G0676 - 08 29 19 1209****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
Batch: 9071168							
A9G0676-02	Soil	EPA 8000C	07/18/19 10:32	07/23/19 15:51			NA
A9G0676-06	Soil	EPA 8000C	07/18/19 11:15	07/23/19 15:51			NA
A9G0676-08	Soil	EPA 8000C	07/18/19 11:35	07/23/19 15:51			NA
A9G0676-10	Soil	EPA 8000C	07/18/19 12:00	07/23/19 15:51			NA
A9G0676-13	Soil	EPA 8000C	07/19/19 08:25	07/23/19 15:51			NA
A9G0676-16	Soil	EPA 8000C	07/19/19 08:55	07/23/19 15:51			NA
A9G0676-17	Soil	EPA 8000C	07/19/19 09:00	07/23/19 15:51			NA
A9G0676-20	Soil	EPA 8000C	07/19/19 09:20	07/23/19 15:51			NA
A9G0676-24	Soil	EPA 8000C	07/19/19 09:40	07/23/19 15:51			NA
A9G0676-28	Soil	EPA 8000C	07/19/19 09:58	07/23/19 15:51			NA
A9G0676-32	Soil	EPA 8000C	07/19/19 10:20	07/23/19 15:51			NA
A9G0676-35	Soil	EPA 8000C	07/19/19 10:35	07/23/19 15:51			NA
A9G0676-38	Soil	EPA 8000C	07/19/19 10:50	07/23/19 15:51			NA
A9G0676-42	Soil	EPA 8000C	07/19/19 11:15	07/23/19 15:51			NA
A9G0676-46	Soil	EPA 8000C	07/19/19 11:35	07/23/19 15:51			NA
Batch: 9080517							
A9G0676-09	Soil	EPA 8000C	07/18/19 11:40	08/01/19 19:11			NA
A9G0676-47	Soil	EPA 8000C	07/19/19 11:40	08/01/19 19:11			NA
Batch: 9080572							
A9G0676-37	Soil	EPA 8000C	07/19/19 10:45	08/02/19 18:29			NA
A9G0676-39	Soil	EPA 8000C	07/19/19 10:55	08/02/19 18:29			NA
A9G0676-44	Soil	EPA 8000C	07/19/19 11:25	08/02/19 18:29			NA
Batch: 9080640							
A9G0676-43	Soil	EPA 8000C	07/19/19 11:20	08/05/19 13:56			NA
Batch: 9080658							
A9G0676-40	Soil	EPA 8000C	07/19/19 11:00	08/06/19 09:58			NA

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

QUALIFIER DEFINITIONS

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

Apex Laboratories

- A-01** Matrix Spike results for this extraction batch are not reported due to instrument malfunction. Batch is accepted based on results of the Blank Spike/Dup.
- A-01a** Reporting limit raised due to possible lab contamination.
- A-01b** Serial dilution performed and meets acceptance criteria. Data is 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-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 due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
- H-06** This sample was received, or the analysis requested, outside the recommended holding time.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- M-05** Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
- P-10** Result estimated due to the presence of multiple PCB Aroclors and/or matrix interference.
- 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-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 erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +0.7%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +0.8%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +1.1%. The results are reported as Estimated Values.

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

- Q-54c** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +104%. 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 8260C/8270D by +11.3%. 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 8260C/8270D by +15.4%. 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 8260C/8270D by +2.2%. The results are reported as Estimated Values.
- Q-54g** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +2.5%. The results are reported as Estimated Values.
- Q-54h** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +20.1%. 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 8260C/8270D by +22.9%. The results are reported as Estimated Values.
- Q-54j** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +27.1%. The results are reported as Estimated Values.
- Q-54k** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +3.0%. The results are reported as Estimated Values.
- Q-54l** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +3.6%. 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 8260C/8270D by +4.0%. 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 8260C/8270D by +4.8%. 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 8260C/8270D by +40.0%. 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 8260C/8270D by +5.0%. The results are reported as Estimated Values.
- Q-54q** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +5.5%. The results are reported as Estimated Values.
- Q-54r** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +6.4%. The results are reported as Estimated Values.
- Q-54s** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +7.5%. The results are reported as Estimated Values.
- Q-54t** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +8.1%. The results are reported as Estimated Values.
- Q-54u** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +99.3%. The results are reported as Estimated Values.
- Q-54v** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -0.7%. The results are reported as Estimated Values.

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

- Q-54w** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -2.2%. The results are reported as Estimated Values.
- Q-54x** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -4.9%. The results are reported as Estimated Values.
- Q-54y** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -5.3%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260C, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C
- 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-02** Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- 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.
- V-15** Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Apex Laboratories

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

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.

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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

GeoDesign, Inc.

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

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

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.

**9450 SW Commerce Circle
Wilsonville, OR 97070**

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0676 - 08 29 19 1209

APEX LABS

67100 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-3323

CHAIN OF CUSTODY

Lab # 19160676 of COC

Company: <u>GeoDesign Inc</u>		Project Mgr: <u>Kyle Haggard</u>		Project Name: <u>BLSAmerica - 1-21-02</u>		Project #:																				
Address: <u>9150 SW Commerce circle suite 300</u>		Phone: <u>503 570 8888</u>		Email: <u>Kinggartexpdesign@ic.com</u>		PO #																				
Sampled by: <u>Kyle Haggard</u> Site Location: _____ OR WA CA _____ AK ID _____																										
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 BTEX	8260 RBDH VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIML PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Tl, V, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	VPH	EPH	Archive		
DP-1 (5-6.5)		7/18/10	10:25	S	5																					
DP-1 (11-12.5)			10:32				X															X				
DP-1 (15-16.5)			10:40																			X				
DP-1 (21-22.5)			10:50																			X				
DP-1 (27.5-29)			11:00																			X				
DP-2 (11-12.5)			11:15				X															X				
DP-2 (16.5-18)			11:20				X															X				
DP-2 (21-22.5)			11:35				X															X				
DP-2 (25-26.5)			11:40				X															X				
DP-3 (10-11.5)			12:00				X															X				

Normal Turn Around Time (TAT) = 10 Business Days

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

SPECIAL INSTRUCTIONS:

Low level detections for table 17 values

Possible follow up for ex, PAHs, SVOCs, metals, UPH

EPH

RELINQUISHED BY:		RECEIVED BY:	
Signature: <u>[Signature]</u>	Date: <u>7/19/14</u>	Signature: _____	Date: _____
Printed Name: <u>Kyle Haggard</u>	Time: <u>1503</u>	Printed Name: _____	Time: _____
Company: <u>GeoDesign Inc</u>	Company: <u>Peak Labs</u>	Company: _____	Company: _____

Apex Laboratories

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Philip Neenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

APEX LABS		CHAIN OF CUSTODY		Lab # <u>A9G0676</u> of <u> </u>	
Company: <u>GeoDesign Inc</u>		Project Mgr: <u>Kyle Haggart</u>		Project Name: <u>BCSAmerica-1-01-02</u>	
Address: <u>9450 SW Commerce Circle Suite 320</u>		Phone: <u>503 577 8883</u>		Email: <u>khaggart@geodesigninc.com</u>	
Sampled by: <u>Kyle Haggart</u>		LAB ID #		DATE	
Site Location: <u>WA CA</u>		MATRIX		# OF CONTAINERS	
AK ID <u> </u>		TIME		DATE	
SAMPLE ID	DP-3 (22-23.5)	7/16/12	5	5	
	DP-4 (6.5-8)	7/19/12	5	5	
	DP-4 (11.5-13)	7/19/12	5	5	
	DP-4 (16.5-18)	7/19/12	5	5	
	DP-5 (6-7.5)	7/19/12	5	5	
	DP-5 (10-11.5)	7/19/12	5	5	
	DP-5 (15-16.5)	7/19/12	5	5	
	DP-6 (2-3.5)	7/19/12	5	5	
	DP-6 (6.5-8)	7/19/12	5	5	
	DP-6 (12-13.5)	7/19/12	5	5	

TAT Requested (circle)		1 Day		2 Day		3 Day		Other:	

RELINQUISHED BY:		RECEIVED BY:	
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>
Date: <u>7/16/12</u>	Date: <u>7/16/12</u>	Date: <u>7/16/12</u>	Date: <u>7/16/12</u>
Printed Name: <u>Kyle Haggart</u>	Printed Name: <u>Amisha Kupp</u>	Printed Name: <u>Amisha Kupp</u>	Printed Name: <u>Amisha Kupp</u>
Company: <u>GeoDesign Inc</u>	Company: <u>Apex Labs</u>	Company: <u>Apex Labs</u>	Company: <u>Apex Labs</u>

RELINQUISHED BY:		RECEIVED BY:	
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>
Date: <u>7/16/12</u>	Date: <u>7/16/12</u>	Date: <u>7/16/12</u>	Date: <u>7/16/12</u>
Printed Name: <u>Kyle Haggart</u>	Printed Name: <u>Amisha Kupp</u>	Printed Name: <u>Amisha Kupp</u>	Printed Name: <u>Amisha Kupp</u>
Company: <u>GeoDesign Inc</u>	Company: <u>Apex Labs</u>	Company: <u>Apex Labs</u>	Company: <u>Apex Labs</u>

RELINQUISHED BY:		RECEIVED BY:	
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>
Date: <u>7/16/12</u>	Date: <u>7/16/12</u>	Date: <u>7/16/12</u>	Date: <u>7/16/12</u>
Printed Name: <u>Kyle Haggart</u>	Printed Name: <u>Amisha Kupp</u>	Printed Name: <u>Amisha Kupp</u>	Printed Name: <u>Amisha Kupp</u>
Company: <u>GeoDesign Inc</u>	Company: <u>Apex Labs</u>	Company: <u>Apex Labs</u>	Company: <u>Apex Labs</u>

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

CHAIN OF CUSTODY

APEX LABS

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

Lab # A9G0676 of

Company: <u>GeoDesign Inc</u>	Project Mgr: <u>Kyle Haggart</u>	Project Name: <u>BCSAmerica-1-01-02</u>	Project #:																			
Address: <u>9450 SW Commerce Circle Wilsonville, OR 97070</u>	Phone: <u>503-577-8853</u>	Email: <u>khaggart@geodesigninc.com</u>	PO #																			
Sampled by: <u>Kyle Haggart</u>	ANALYSIS REQUEST																					
Site Location: <u>WA CA</u>																						
AK ID <u> </u>																						
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Bi, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, Ti, V, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	Archive	
<u>DP-6 (17-18.5)</u>	<u>7/19</u>	<u>9:25</u>	<u>5</u>	<u>5</u>	<u>5</u>																	
<u>DP-7 (1-2.5)</u>			<u>9:30</u>																			
<u>DP-7 (6.5-8)</u>			<u>9:35</u>																			
<u>DP-7 (11.5-13)</u>			<u>9:40</u>																			
<u>DP-7 (16.5-18)</u>			<u>9:45</u>																			
<u>DP-8 (11.5-13)</u>			<u>9:50</u>																			
<u>DP-8 (6.5-8)</u>			<u>9:55</u>																			
<u>DP-8 (11.5-13)</u>			<u>9:58</u>																			
<u>DP-8 (17-18.5)</u>			<u>10:00</u>																			
<u>DP-9 (1-2.5)</u>			<u>10:10</u>																			
Normal Turn Around Time (TAT) = 10 Business Days																						
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: <u> </u>																						
SPECIAL INSTRUCTIONS:																						
RELIQUISHED BY: Signature: <u>[Signature]</u> Date: <u>7/19/19</u>												RECEIVED BY: Signature: <u>[Signature]</u> Date: <u>7/19/19</u>										
Printed Name: <u>Kyle Haggart</u> Time: <u>1503</u>												Printed Name: <u>Amisha Koppa</u> Time: <u>1503</u>										
Company: <u>GeoDesign Inc</u>												Company: <u>Apex Labs</u>										

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

CHAIN OF CUSTODY

APEX LABS

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

Lab # 414/01/19 of COC

Company: <u>GeoDesign Inc</u>	Project Mgr: <u>Kyle Haggart</u>	Project Name: <u>BCSAmerica-1-01-02</u>	Project #:																						
Address: <u>9450 SW Commerce Circle Suite 300 Wilsonville, OR 97070</u>		Phone: <u>503 552 5455</u>	PO #																						
Email: <u>khaggart@geodesigninc.com</u>																									
Sampled by: <u>Kyle Haggart</u>	ANALYSIS REQUEST																								
Site Location: <u>WA CA</u>																									
AK ID: <u>---</u>																									
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Bi, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, Ti, V, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	ENT	Archive		
<u>DP-12(0.5-2)</u>		<u>7.19</u>	<u>11:05</u>	<u>5</u>	<u>3</u>																				
<u>DP-12(5-6.5)</u>			<u>11:15</u>																						
<u>DP-12(10-11.5)</u>			<u>11:20</u>																						
<u>DP-12(16.5-18)</u>			<u>11:25</u>																						
<u>DP-13(15-3)</u>			<u>11:30</u>																						
<u>DP-13(5-6.5)</u>			<u>11:35</u>																						
<u>DP-13(10-11.5)</u>			<u>11:40</u>																						

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.

Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0676 - 08 29 19 1209

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A9 G0676

Project/Project #: BCSAmerica-1-01-02

Delivery Info:

Date/time received: 7/19/19 @ 1503 By: APK

Delivered by: Apex ☐ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Date/time inspected: 7/19/19 @ 1503 By: APK

Chain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒

Signed/dated by client? Yes ☒ No ☐

Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.0</u>	<u>4.9</u>	<u>2.2</u>				
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Temp. blanks? (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>				
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>	<u>Real</u>				
Condition:	<u>Good</u>	<u>Good</u>	<u>Good</u>				

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: 7/22/19 @ 15:05 By: WJ

All samples intact? Yes ☒ No ☐ Comments:

Bottle labels/COCs agree? Yes ☐ No ☒ Comments: Label reads BCSAmerica-1-01-2,
on Project line and sample Id. Line. Bagged w/ DP-10(6-7.5)*

COC/container discrepancies form initiated? Yes ☐ No ☐ NA ☒

Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:

Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments:

Water samples: pH checked: Yes ☐ No ☐ NA ☒ pH appropriate? Yes ☐ No ☐ NA ☒

Comments:

Additional information: *Marked by time and date. Label reads DP-11(6-7.5) on
jar. Label reads DP-11(6-7.5)

Labeled by: WJ

Witness: TPM

Cooler Inspected by: WJ

See Project Contact Form: Y

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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.



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

Apex Laboratories
Philip Nerenberg
6700 SW Sandburg St
Tigard, OR 97223

RE: A9G0676
Work Order Number: 1907338

August 21, 2019

Attention Philip Nerenberg:

Fremont Analytical, Inc. received 47 sample(s) on 7/25/2019 for the analyses presented in the following report.

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

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes".

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Apex Laboratories
Project: A9G0676
Work Order: 1907338

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1907338-001	DP-1(5-6.5)	07/18/2019 10:25 AM	07/25/2019 9:49 AM
1907338-002	DP-1(11-12.5)	07/18/2019 10:32 AM	07/25/2019 9:49 AM
1907338-003	DP-1(15-16.5)	07/18/2019 10:40 AM	07/25/2019 9:49 AM
1907338-004	DP-1(21-22.5)	07/18/2019 10:50 AM	07/25/2019 9:49 AM
1907338-005	DP-1(27.5-29)	07/18/2019 11:00 AM	07/25/2019 9:49 AM
1907338-006	DP-2(11-12.5)	07/18/2019 11:15 AM	07/25/2019 9:49 AM
1907338-007	DP-2(16.5-18)	07/18/2019 11:20 AM	07/25/2019 9:49 AM
1907338-008	DP-2(21-22.5)	07/18/2019 11:35 AM	07/25/2019 9:49 AM
1907338-009	DP-2(25-26.5)	07/18/2019 11:40 AM	07/25/2019 9:49 AM
1907338-010	DP-3(10-11.5)	07/18/2019 12:00 PM	07/25/2019 9:49 AM
1907338-011	DP-3(22-23.5)	07/18/2019 12:18 PM	07/25/2019 9:49 AM
1907338-012	DP-4(6.5-8)	07/19/2019 8:20 AM	07/25/2019 9:49 AM
1907338-013	DP-4(11.5-13)	07/19/2019 8:25 AM	07/25/2019 9:49 AM
1907338-014	DP-4(16.5-18)	07/19/2019 8:30 AM	07/25/2019 9:49 AM
1907338-015	DP-5(6-7.5)	07/19/2019 8:47 AM	07/25/2019 9:49 AM
1907338-016	DP-5(10-11.5)	07/19/2019 8:55 AM	07/25/2019 9:49 AM
1907338-017	DP-5(15-16.5)	07/19/2019 9:00 AM	07/25/2019 9:49 AM
1907338-018	DP-6(2-3.5)	07/19/2019 9:10 AM	07/25/2019 9:49 AM
1907338-019	DP-6(6.5-8)	07/19/2019 9:15 AM	07/25/2019 9:49 AM
1907338-020	DP-6(12-13.5)	07/19/2019 9:20 AM	07/25/2019 9:49 AM
1907338-021	DP-6(17-18.5)	07/19/2019 9:25 AM	07/25/2019 9:49 AM
1907338-022	DP-7(1-2.5)	07/19/2019 9:30 AM	07/25/2019 9:49 AM
1907338-023	DP-7(6.5-8)	07/19/2019 9:35 AM	07/25/2019 9:49 AM
1907338-024	DP-7(11.5-13)	07/19/2019 9:40 AM	07/25/2019 9:49 AM
1907338-025	DP-7(16.5-18)	07/19/2019 9:45 AM	07/25/2019 9:49 AM
1907338-026	DP-8(1.5-3)	07/19/2019 9:50 AM	07/25/2019 9:49 AM
1907338-027	DP-8(6.5-8)	07/19/2019 9:55 AM	07/25/2019 9:49 AM
1907338-028	DP-8(11.5-13)	07/19/2019 9:58 AM	07/25/2019 9:49 AM
1907338-029	DP-8(17-18.5)	07/19/2019 10:00 AM	07/25/2019 9:49 AM
1907338-030	DP-9(1-2.5)	07/19/2019 10:10 AM	07/25/2019 9:49 AM
1907338-031	DP-9(6.5-8)	07/19/2019 10:15 AM	07/25/2019 9:49 AM
1907338-032	DP-9(11-12.5)	07/19/2019 10:20 AM	07/25/2019 9:49 AM
1907338-033	DP-9(16.5-18)	07/19/2019 10:25 AM	07/25/2019 9:49 AM
1907338-034	DP-10(1.5-3)	07/19/2019 10:30 AM	07/25/2019 9:49 AM
1907338-035	DP-10(6-7.5)	07/19/2019 10:35 AM	07/25/2019 9:49 AM
1907338-036	DP-10(11.5-13)	07/19/2019 10:40 AM	07/25/2019 9:49 AM

CLIENT: Apex Laboratories
Project: A9G0676
Work Order: 1907338

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1907338-037	DP-10(16.5-18)	07/19/2019 10:45 AM	07/25/2019 9:49 AM
1907338-038	DP-11(6-7.5)	07/19/2019 10:50 AM	07/25/2019 9:49 AM
1907338-039	DP-11(10-11.5)	07/19/2019 10:55 AM	07/25/2019 9:49 AM
1907338-040	DP-11(16.5-18)	07/19/2019 11:00 AM	07/25/2019 9:49 AM
1907338-041	DP-12(0.5-2)	07/19/2019 11:10 AM	07/25/2019 9:49 AM
1907338-042	DP-12(5-6.5)	07/19/2019 11:15 AM	07/25/2019 9:49 AM
1907338-043	DP-12(10-11.5)	07/19/2019 11:20 AM	07/25/2019 9:49 AM
1907338-044	DP-12(16.5-18)	07/19/2019 11:25 AM	07/25/2019 9:49 AM
1907338-045	DP-13(1.5-3)	07/19/2019 11:30 AM	07/25/2019 9:49 AM
1907338-046	DP-13(5-6.5)	07/19/2019 11:35 AM	07/25/2019 9:49 AM
1907338-047	DP-13(10-11.5)	07/19/2019 11:40 AM	07/25/2019 9:49 AM

CLIENT: Apex Laboratories**Project:** A9G0676

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

8/21/19: Rev1 includes only VPH carbon ranges per client request.

Qualifiers:

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

Acronyms:

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



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 10:32:00 AM

Project: A9G0676

Lab ID: 1907338-002

Matrix: Soil

Client Sample ID: DP-1(11-12.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	25.9	*	mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	13.0		mg/Kg-dry	1	8/6/2019 5:08:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	13.0	*	mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	13.0	*	mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	13.0		mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	13.0		mg/Kg-dry	1	8/7/2019 12:31:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	13.0		mg/Kg-dry	1	8/7/2019 12:31:00 PM
Surr: 1-Chlorooctadecane	62.5	60 - 140		%Rec	1	8/6/2019 5:08:00 PM
Surr: o-Terphenyl	64.1	60 - 140		%Rec	1	8/7/2019 12:31:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	3.69		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aliphatic Hydrocarbon (C6-C8)	ND	5.28		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aliphatic Hydrocarbon (C8-C10)	ND	2.96		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aliphatic Hydrocarbon (C10-C12)	ND	3.17		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aromatic Hydrocarbon (C8-C10)	ND	6.33		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aromatic Hydrocarbon (C10-C12)	ND	1.27		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Aromatic Hydrocarbon (C12-C13)	ND	14.8		mg/Kg-dry	1	7/29/2019 9:25:02 PM
Surr: 1,4-Difluorobenzene	101	65 - 140		%Rec	1	7/29/2019 9:25:02 PM
Surr: Bromofluorobenzene	104	65 - 140		%Rec	1	7/29/2019 9:25:02 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	24.0	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 11:15:00 AM

Project: A9G0676

Lab ID: 1907338-006

Matrix: Soil

Client Sample ID: DP-2(11-12.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	18.8	*	mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	9.42		mg/Kg-dry	1	8/6/2019 5:53:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	9.42	*	mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	9.42	*	mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	9.42		mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	9.42		mg/Kg-dry	1	8/7/2019 1:15:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	9.42		mg/Kg-dry	1	8/7/2019 1:15:00 PM
Surr: 1-Chlorooctadecane	64.9	60 - 140		%Rec	1	8/6/2019 5:53:00 PM
Surr: o-Terphenyl	68.8	60 - 140		%Rec	1	8/7/2019 1:15:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.04		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aliphatic Hydrocarbon (C6-C8)	ND	2.91		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.63		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.74		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.49		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.698		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Aromatic Hydrocarbon (C12-C13)	ND	8.14		mg/Kg-dry	1	7/29/2019 10:06:09 PM
Surr: 1,4-Difluorobenzene	99.2	65 - 140		%Rec	1	7/29/2019 10:06:09 PM
Surr: Bromofluorobenzene	102	65 - 140		%Rec	1	7/29/2019 10:06:09 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	8.83	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 11:35:00 AM

Project: A9G0676

Lab ID: 1907338-008

Matrix: Soil

Client Sample ID: DP-2(21-22.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	20.4	*	mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/13/2019 12:01:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.2	*	mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.2	*	mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/13/2019 6:54:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/13/2019 6:54:00 PM
Surr: 1-Chlorooctadecane	84.6	60 - 140		%Rec	1	8/13/2019 12:01:00 PM
Surr: o-Terphenyl	80.3	60 - 140		%Rec	1	8/13/2019 6:54:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	1.96		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aliphatic Hydrocarbon (C6-C8)	ND	2.81		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.57	H	mg/Kg-dry	1	8/8/2019 11:14:26 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.57	Q	mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.68		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.37		mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aromatic Hydrocarbon (C10-C12)	0.880	0.673	Q	mg/Kg-dry	1	8/1/2019 11:27:18 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.673	H	mg/Kg-dry	1	8/8/2019 11:14:26 PM
Aromatic Hydrocarbon (C12-C13)	ND	7.85	H	mg/Kg-dry	1	8/8/2019 11:14:26 PM
Aromatic Hydrocarbon (C12-C13)	ND	7.85	Q	mg/Kg-dry	1	8/1/2019 11:27:18 PM
Surr: 1,4-Difluorobenzene	101	65 - 140		%Rec	1	8/1/2019 11:27:18 PM
Surr: Bromofluorobenzene	104	65 - 140		%Rec	1	8/1/2019 11:27:18 PM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	16.7	0.500		wt%	1	8/2/2019 3:37:27 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/18/2019 12:00:00 PM

Project: A9G0676

Lab ID: 1907338-010

Matrix: Soil

Client Sample ID: DP-3(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	24.4	*	mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	12.2		mg/Kg-dry	1	8/6/2019 6:40:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	12.2	*	mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	12.2	*	mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	12.2		mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	12.2		mg/Kg-dry	1	8/7/2019 1:59:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	12.2		mg/Kg-dry	1	8/7/2019 1:59:00 PM
Surr: 1-Chlorooctadecane	70.5	60 - 140		%Rec	1	8/6/2019 6:40:00 PM
Surr: o-Terphenyl	74.9	60 - 140		%Rec	1	8/7/2019 1:59:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.30		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aliphatic Hydrocarbon (C6-C8)	ND	3.29		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.84		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.97		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.95		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.790		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Aromatic Hydrocarbon (C12-C13)	ND	9.21		mg/Kg-dry	1	7/29/2019 10:47:20 PM
Surr: 1,4-Difluorobenzene	99.4	65 - 140		%Rec	1	7/29/2019 10:47:20 PM
Surr: Bromofluorobenzene	102	65 - 140		%Rec	1	7/29/2019 10:47:20 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	20.4	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 8:55:00 AM

Project: A9G0676

Lab ID: 1907338-016

Matrix: Soil

Client Sample ID: DP-5(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	20.5	*	mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/6/2019 7:26:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.2	*	mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.2	*	mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.2		mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.2		mg/Kg-dry	1	8/7/2019 2:43:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.2		mg/Kg-dry	1	8/7/2019 2:43:00 PM
Surr: 1-Chlorooctadecane	78.9	60 - 140		%Rec	1	8/6/2019 7:26:00 PM
Surr: o-Terphenyl	77.4	60 - 140		%Rec	1	8/7/2019 2:43:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.01		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aliphatic Hydrocarbon (C6-C8)	ND	2.87		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aliphatic Hydrocarbon (C8-C10)	ND	1.61		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aliphatic Hydrocarbon (C10-C12)	ND	1.72		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aromatic Hydrocarbon (C8-C10)	ND	3.44		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aromatic Hydrocarbon (C10-C12)	ND	0.688		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Aromatic Hydrocarbon (C12-C13)	ND	8.03		mg/Kg-dry	1	7/29/2019 11:28:23 PM
Surr: 1,4-Difluorobenzene	99.7	65 - 140		%Rec	1	7/29/2019 11:28:23 PM
Surr: Bromofluorobenzene	101	65 - 140		%Rec	1	7/29/2019 11:28:23 PM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	10.5	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 10:35:00 AM

Project: A9G0676

Lab ID: 1907338-035

Matrix: Soil

Client Sample ID: DP-10(6-7.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	20.9	*	mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.4		mg/Kg-dry	1	8/6/2019 8:12:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.4	*	mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.4	*	mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.4		mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.4		mg/Kg-dry	1	8/7/2019 3:28:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.4		mg/Kg-dry	1	8/7/2019 3:28:00 PM
Surr: 1-Chlorooctadecane	71.4	60 - 140		%Rec	1	8/6/2019 8:12:00 PM
Surr: o-Terphenyl	61.5	60 - 140		%Rec	1	8/8/2019 1:01:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.07		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.95		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.65		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aliphatic Hydrocarbon (C10-C12)	ND	1.77		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.54		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.709		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Aromatic Hydrocarbon (C12-C13)	ND	8.27		mg/Kg-dry	1	7/30/2019 12:09:25 AM
Surr: 1,4-Difluorobenzene	97.9	65 - 140		%Rec	1	7/30/2019 12:09:25 AM
Surr: Bromofluorobenzene	99.1	65 - 140		%Rec	1	7/30/2019 12:09:25 AM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	10.9	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 10:50:00 AM

Project: A9G0676

Lab ID: 1907338-038

Matrix: Soil

Client Sample ID: DP-11(6-7.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	23.8	*	mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aliphatic Hydrocarbon (C21-C34)	17.1	11.9		mg/Kg-dry	1	8/6/2019 8:58:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	11.9	*	mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	11.9	*	mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	11.9		mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C16-C21)	17.8	11.9		mg/Kg-dry	1	8/7/2019 4:13:00 PM
Aromatic Hydrocarbon (C21-C34)	62.4	11.9		mg/Kg-dry	1	8/7/2019 4:13:00 PM
Surr: 1-Chlorooctadecane	49.0	60 - 140	S	%Rec	1	8/6/2019 8:58:00 PM
Surr: o-Terphenyl	55.1	60 - 140	S	%Rec	1	8/7/2019 4:13:00 PM

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.90		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aliphatic Hydrocarbon (C6-C8)	ND	4.14		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.32		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aliphatic Hydrocarbon (C10-C12)	ND	2.49		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aromatic Hydrocarbon (C8-C10)	ND	4.97		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aromatic Hydrocarbon (C10-C12)	1.25	0.994		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Aromatic Hydrocarbon (C12-C13)	ND	11.6		mg/Kg-dry	1	7/30/2019 12:50:26 AM
Surr: 1,4-Difluorobenzene	97.4	65 - 140		%Rec	1	7/30/2019 12:50:26 AM
Surr: Bromofluorobenzene	97.1	65 - 140		%Rec	1	7/30/2019 12:50:26 AM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	18.4	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 10:55:00 AM

Project: A9G0676

Lab ID: 1907338-039

Matrix: Soil

Client Sample ID: DP-11(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	18.9	*	mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	9.46		mg/Kg-dry	1	8/13/2019 12:45:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	9.46	*	mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	9.46	*	mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	9.46		mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	9.46		mg/Kg-dry	1	8/13/2019 7:41:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	9.46		mg/Kg-dry	1	8/13/2019 7:41:00 PM
Surr: 1-Chlorooctadecane	73.9	60 - 140		%Rec	1	8/13/2019 12:45:00 PM
Surr: o-Terphenyl	76.8	60 - 140		%Rec	1	8/13/2019 7:41:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.89		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aliphatic Hydrocarbon (C6-C8)	ND	4.14		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.32	H	mg/Kg-dry	1	8/8/2019 11:55:21 PM
Aliphatic Hydrocarbon (C8-C10)	ND	2.32	Q	mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aliphatic Hydrocarbon (C10-C12)	ND	2.48		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aromatic Hydrocarbon (C8-C10)	ND	4.96		mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.992	Q	mg/Kg-dry	1	8/2/2019 12:49:53 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.992	H	mg/Kg-dry	1	8/8/2019 11:55:21 PM
Aromatic Hydrocarbon (C12-C13)	ND	11.6	H	mg/Kg-dry	1	8/8/2019 11:55:21 PM
Aromatic Hydrocarbon (C12-C13)	ND	11.6	Q	mg/Kg-dry	1	8/2/2019 12:49:53 AM
Surr: 1,4-Difluorobenzene	101	65 - 140		%Rec	1	8/2/2019 12:49:53 AM
Surr: Bromofluorobenzene	102	65 - 140		%Rec	1	8/2/2019 12:49:53 AM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	9.91	0.500		wt%	1	8/2/2019 3:37:27 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:15:00 AM

Project: A9G0676

Lab ID: 1907338-042

Matrix: Soil

Client Sample ID: DP-12(5-6.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	21.8	*	mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C12-C16)	62.9	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C16-C21)	78.8	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aliphatic Hydrocarbon (C21-C34)	26.9	10.9		mg/Kg-dry	1	8/6/2019 9:43:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.9	*	mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.9	*	mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.9		mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C16-C21)	16.1	10.9		mg/Kg-dry	1	8/7/2019 11:44:00 PM
Aromatic Hydrocarbon (C21-C34)	54.0	10.9		mg/Kg-dry	1	8/7/2019 11:44:00 PM
Surr: 1-Chlorooctadecane	53.5	60 - 140	S	%Rec	1	8/6/2019 9:43:00 PM
Surr: o-Terphenyl	61.5	60 - 140		%Rec	1	8/7/2019 11:44:00 PM

NOTES:

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

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.28		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aliphatic Hydrocarbon (C6-C8)	ND	3.26		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.83		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aliphatic Hydrocarbon (C10-C12)	2.12	1.96		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.91		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aromatic Hydrocarbon (C10-C12)	6.63	0.783		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Aromatic Hydrocarbon (C12-C13)	ND	9.13		mg/Kg-dry	1	7/30/2019 1:31:32 AM
Surr: 1,4-Difluorobenzene	95.9	65 - 140		%Rec	1	7/30/2019 1:31:32 AM
Surr: Bromofluorobenzene	94.9	65 - 140		%Rec	1	7/30/2019 1:31:32 AM

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	15.0	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:20:00 AM

Project: A9G0676

Lab ID: 1907338-043

Matrix: Soil

Client Sample ID: DP-12(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	21.4	*	mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C10-C12)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C12-C16)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C16-C21)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aliphatic Hydrocarbon (C21-C34)	ND	10.7		mg/Kg-dry	1	8/13/2019 1:30:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	10.7	*	mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	10.7	*	mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	10.7		mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	10.7		mg/Kg-dry	1	8/13/2019 8:28:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	10.7		mg/Kg-dry	1	8/13/2019 8:28:00 PM
Surr: 1-Chlorooctadecane	78.7	60 - 140		%Rec	1	8/13/2019 1:30:00 PM
Surr: o-Terphenyl	63.2	60 - 140		%Rec	1	8/13/2019 8:28:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	1.86		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.66		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.49	H	mg/Kg-dry	1	8/9/2019 12:36:16 AM
Aliphatic Hydrocarbon (C8-C10)	ND	1.49	Q	mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aliphatic Hydrocarbon (C10-C12)	ND	1.60		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.20		mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.639	Q	mg/Kg-dry	1	8/2/2019 1:31:04 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.639	H	mg/Kg-dry	1	8/9/2019 12:36:16 AM
Aromatic Hydrocarbon (C12-C13)	ND	7.46	H	mg/Kg-dry	1	8/9/2019 12:36:16 AM
Aromatic Hydrocarbon (C12-C13)	ND	7.46	Q	mg/Kg-dry	1	8/2/2019 1:31:04 AM
Surr: 1,4-Difluorobenzene	99.0	65 - 140		%Rec	1	8/2/2019 1:31:04 AM
Surr: Bromofluorobenzene	99.2	65 - 140		%Rec	1	8/2/2019 1:31:04 AM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	9.46	0.500		wt%	1	8/2/2019 3:37:27 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:35:00 AM

Project: A9G0676

Lab ID: 1907338-046

Matrix: Soil

Client Sample ID: DP-13(5-6.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	19.8	*	mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C10-C12)	ND	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C12-C16)	11.4	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C16-C21)	58.3	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aliphatic Hydrocarbon (C21-C34)	158	9.88		mg/Kg-dry	1	8/7/2019 3:41:00 AM
Aromatic Hydrocarbon (C8-C10)	ND	9.88	*	mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	9.88	*	mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C12-C16)	ND	9.88		mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C16-C21)	25.4	9.88		mg/Kg-dry	1	8/8/2019 12:29:00 AM
Aromatic Hydrocarbon (C21-C34)	128	9.88		mg/Kg-dry	1	8/8/2019 12:29:00 AM
Surr: 1-Chlorooctadecane	54.4	60 - 140	S	%Rec	1	8/7/2019 3:41:00 AM
Surr: o-Terphenyl	53.6	60 - 140	S	%Rec	1	8/8/2019 12:29:00 AM

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25324

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	1.93		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aliphatic Hydrocarbon (C6-C8)	ND	2.76		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aliphatic Hydrocarbon (C8-C10)	1.83	1.55		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aliphatic Hydrocarbon (C10-C12)	9.89	1.66		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aromatic Hydrocarbon (C8-C10)	ND	3.32		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aromatic Hydrocarbon (C10-C12)	10.4	0.663		mg/Kg-dry	1	7/30/2019 2:12:37 AM
Aromatic Hydrocarbon (C12-C13)	11.8	7.74	*	mg/Kg-dry	1	7/30/2019 2:12:37 AM
Surr: 1,4-Difluorobenzene	95.7	65 - 140		%Rec	1	7/30/2019 2:12:37 AM
Surr: Bromofluorobenzene	98.5	65 - 140		%Rec	1	7/30/2019 2:12:37 AM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R52882

Analyst: KP

Percent Moisture	10.9	0.500		wt%	1	7/25/2019 3:52:38 PM



Analytical Report

Work Order: 1907338
Date Reported: 8/21/2019

Client: Apex Laboratories

Collection Date: 7/19/2019 11:40:00 AM

Project: A9G0676

Lab ID: 1907338-047

Matrix: Soil

Client Sample ID: DP-13(10-11.5)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed

Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 25343

Analyst: DW

Aliphatic Hydrocarbon (C8-C10)	ND	22.4	*	mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C10-C12)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C12-C16)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C16-C21)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aliphatic Hydrocarbon (C21-C34)	ND	11.2		mg/Kg-dry	1	8/7/2019 5:54:00 AM
Aromatic Hydrocarbon (C8-C10)	ND	11.2	*	mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C10-C12)	ND	11.2	*	mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C12-C16)	ND	11.2		mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C16-C21)	ND	11.2		mg/Kg-dry	1	8/7/2019 10:15:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	11.2		mg/Kg-dry	1	8/7/2019 10:15:00 PM
Surr: 1-Chlorooctadecane	72.5	60 - 140		%Rec	1	8/7/2019 5:54:00 AM
Surr: o-Terphenyl	71.3	60 - 140		%Rec	1	8/7/2019 10:15:00 PM

NOTES:

* - Flagged value is not within established control limits.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 25370

Analyst: CR

Aliphatic Hydrocarbon (C5-C6)	ND	2.58		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aliphatic Hydrocarbon (C6-C8)	ND	3.68		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.06	H	mg/Kg-dry	1	8/9/2019 1:58:05 AM
Aliphatic Hydrocarbon (C8-C10)	ND	2.06	Q	mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aliphatic Hydrocarbon (C10-C12)	ND	2.21		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aromatic Hydrocarbon (C8-C10)	ND	4.42		mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.884	Q	mg/Kg-dry	1	8/2/2019 2:12:21 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.884	H	mg/Kg-dry	1	8/9/2019 1:58:05 AM
Aromatic Hydrocarbon (C12-C13)	ND	10.3	H	mg/Kg-dry	1	8/9/2019 1:58:05 AM
Aromatic Hydrocarbon (C12-C13)	ND	10.3	Q	mg/Kg-dry	1	8/2/2019 2:12:21 AM
Surr: 1,4-Difluorobenzene	99.4	65 - 140		%Rec	1	8/2/2019 2:12:21 AM
Surr: Bromofluorobenzene	98.8	65 - 140		%Rec	1	8/2/2019 2:12:21 AM

NOTES:

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

Sample Moisture (Percent Moisture)

Batch ID: R53032

Analyst: KP

Percent Moisture	21.7	0.500		wt%	1	8/2/2019 3:37:27 PM

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: MB-25343	SampType: MBLK	Units: mg/Kg			Prep Date: 7/30/2019			RunNo: 53106			
Client ID: MBLKS	Batch ID: 25343	Analysis Date: 8/6/2019							SeqNo: 1049723		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	20.0									*
Aliphatic Hydrocarbon (C10-C12)	ND	10.0									
Aliphatic Hydrocarbon (C12-C16)	ND	10.0									
Aliphatic Hydrocarbon (C16-C21)	ND	10.0									
Aliphatic Hydrocarbon (C21-C34)	ND	10.0									
Surr: 1-Chlorooctadecane	92.5		100.0		92.5	60	140				

NOTES:

* - Flagged value is not within established control limits.

Sample ID: LCS-25343		SampType: LCS		Units: mg/Kg		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: LCSS		Batch ID: 25343		Analysis Date: 8/6/2019						SeqNo: 1049799	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	99.8	20.0	250.0	0	39.9	70	130				S
Aliphatic Hydrocarbon (C10-C12)	159	10.0	125.0	0	127	70	130				
Aliphatic Hydrocarbon (C12-C16)	118	10.0	125.0	0	94.6	70	130				
Aliphatic Hydrocarbon (C16-C21)	119	10.0	125.0	0	95.2	70	130				
Aliphatic Hydrocarbon (C21-C34)	114	10.0	125.0	0	91.0	70	130				
Surr: 1-Chlorooctadecane	74.5		100.0		74.5	60	140				

NOTES:

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

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343		Analysis Date: 8/7/2019						SeqNo: 1049710	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	23.8						0		25	*
Aliphatic Hydrocarbon (C10-C12)	ND	11.9						0		25	
Aliphatic Hydrocarbon (C12-C16)	ND	11.9						0		25	
Aliphatic Hydrocarbon (C16-C21)	ND	11.9						0		25	
Aliphatic Hydrocarbon (C21-C34)	ND	11.9						0		25	
Surr: 1-Chlorooctadecane	70.1		119.0		58.9	60	140		0		S

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343		Analysis Date: 8/7/2019						SeqNo: 1049710	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Outlying surrogate recovery(ies) observed.

* - Flagged value is not within established control limits.

Sample ID: 1907338-002AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106			
Client ID: DP-1(11-12.5)		Batch ID: 25343					Analysis Date: 8/7/2019			SeqNo: 1049711		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	111	24.2	302.5	0	36.7	70	130				S
Aliphatic Hydrocarbon (C10-C12)	131	12.1	151.3	0	86.7	70	130				
Aliphatic Hydrocarbon (C12-C16)	132	12.1	151.3	0	87.2	70	130				
Aliphatic Hydrocarbon (C16-C21)	133	12.1	151.3	0	87.8	70	130				
Aliphatic Hydrocarbon (C21-C34)	126	12.1	151.3	0	83.1	70	130				
Surr: 1-Chlorooctadecane	79.3		121.0		65.5	60	140				

NOTES:

S - Outlying spike recovery(ies) observed.

Sample ID: 1907338-002AMSD	SampType: MSD	Units: mg/Kg-dry				Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)	Batch ID: 25343					Analysis Date: 8/7/2019			SeqNo: 1049798		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aliphatic Hydrocarbon (C8-C10)	116	26.2	326.9	0	35.5	70	130	111.1	4.51	30	S
Aliphatic Hydrocarbon (C10-C12)	130	13.1	163.4	0	79.5	70	130	131.1	0.923	30	
Aliphatic Hydrocarbon (C12-C16)	118	13.1	163.4	0	72.1	70	130	131.9	11.2	30	
Aliphatic Hydrocarbon (C16-C21)	119	13.1	163.4	0	73.1	70	130	132.8	10.5	30	
Aliphatic Hydrocarbon (C21-C34)	119	13.1	163.4	0	72.6	70	130	125.7	5.69	30	
Surr: 1-Chlorooctadecane	91.9		130.8		70.3	60	140		0		

NOTES:

S - Outlying spike recovery(ies) observed.

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-047ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-13(10-11.5)		Batch ID: 25343					Analysis Date: 8/7/2019			SeqNo: 1049718	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	24.9						0		25	*
Aliphatic Hydrocarbon (C10-C12)	ND	12.5						0		25	
Aliphatic Hydrocarbon (C12-C16)	ND	12.5						0		25	
Aliphatic Hydrocarbon (C16-C21)	ND	12.5						0		25	
Aliphatic Hydrocarbon (C21-C34)	ND	12.5						0		25	
Surr: 1-Chlorooctadecane	93.1		124.7		74.7	60	140		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID: MB-25343	SampType: MBLK	Units: mg/Kg				Prep Date: 7/30/2019			RunNo: 53106		
Client ID: MBLKS	Batch ID: 25343	Analysis Date: 8/7/2019							SeqNo: 1049836		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	ND	10.0									*
Aromatic Hydrocarbon (C10-C12)	ND	10.0									*
Aromatic Hydrocarbon (C12-C16)	ND	10.0									
Aromatic Hydrocarbon (C16-C21)	ND	10.0									
Aromatic Hydrocarbon (C21-C34)	ND	10.0									
Surr: o-Terphenyl	80.9		100.0		80.9	60	140				

NOTES:

* - Flagged value is not within established control limits.

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343					Analysis Date: 8/7/2019			SeqNo: 1049825	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	ND	11.9						0		25	*
Aromatic Hydrocarbon (C10-C12)	ND	11.9						0		25	*
Aromatic Hydrocarbon (C12-C16)	ND	11.9						0		25	
Aromatic Hydrocarbon (C16-C21)	ND	11.9						0		25	
Aromatic Hydrocarbon (C21-C34)	ND	11.9						0		25	

Work Order: 1907338

CLIENT: Apex Laboratories

Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-002ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343					Analysis Date: 8/7/2019			SeqNo: 1049825	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

* - Flagged value is not within established control limits.

Sample ID: 1907338-002AMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 7/30/2019			RunNo: 53106			
Client ID: DP-1(11-12.5)	Batch ID: 25343				Analysis Date: 8/7/2019			SeqNo: 1049826			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	38.1	12.1	302.5	0	12.6	70	130				S
Aromatic Hydrocarbon (C10-C12)	67.8	12.1	151.3	0	44.8	70	130				S
Aromatic Hydrocarbon (C12-C16)	93.0	12.1	151.3	0	61.4	70	130				S
Surr: o-Terphenyl	79.1		121.0		65.4	60	140				

NOTES:

S - Outlying spike recovery(ies) observed.

Sample ID: 1907338-002AMSD	SampType: MSD	Units: mg/Kg-dry				Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)	Batch ID: 25343	Analysis Date: 8/7/2019							SeqNo: 1049827		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	61.9	13.1	326.9	0	18.9	70	130	38.13	47.5	30	RS
Aromatic Hydrocarbon (C10-C12)	105	13.1	163.4	0	64.4	70	130	67.75	43.4	30	RS
Surr: o-Terphenyl	96.6		130.8		73.9	60	140		0		

NOTES:

S - Outlying spike recovery(ies) observed.

R - High RPD due to suspected sample inhomogeneity.

Sample ID: 1907338-047ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-13(10-11.5)		Batch ID: 25343			Analysis Date: 8/7/2019					SeqNo: 1049829		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Aromatic Hydrocarbon (C8-C10)	ND	12.5						0		25	*	
Aromatic Hydrocarbon (C10-C12)	ND	12.5						0		25	*	
Aromatic Hydrocarbon (C12-C16)	ND	12.5						0		25		

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-047ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-13(10-11.5)		Batch ID: 25343			Analysis Date: 8/7/2019			SeqNo: 1049829				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aromatic Hydrocarbon (C16-C21)	ND	12.5						0		25	
Aromatic Hydrocarbon (C21-C34)	ND	12.5						0		25	
Surr: o-Terphenyl	87.7		124.7		70.4	60	140		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID: LCS-25343		SampType: LCS			Units: mg/Kg		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: LCSS		Batch ID: 25343			Analysis Date: 8/8/2019			SeqNo: 1049835				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aromatic Hydrocarbon (C8-C10)	14.8	10.0	250.0	0	5.92	70	130				S
Aromatic Hydrocarbon (C10-C12)	46.5	10.0	125.0	0	37.2	70	130				S
Aromatic Hydrocarbon (C12-C16)	101	10.0	125.0	0	80.4	70	130				
Aromatic Hydrocarbon (C16-C21)	114	10.0	125.0	0	91.1	70	130				
Aromatic Hydrocarbon (C21-C34)	100	10.0	125.0	0	80.2	70	130				
Surr: o-Terphenyl	86.2		100.0		86.2	60	140				

NOTES:

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

Sample ID: 1907338-002ADUP		SampType: DUP			Units: %Rec		Prep Date: 7/30/2019			RunNo: 53106		
Client ID: DP-1(11-12.5)		Batch ID: 25343			Analysis Date: 8/8/2019			SeqNo: 1050366				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Surr: o-Terphenyl	72.4		119.0		60.8	60	140		0		

Sample ID: 1907338-002AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 7/30/2019			RunNo: 53106			
Client ID: DP-1(11-12.5)		Batch ID: 25343					Analysis Date: 8/8/2019			SeqNo: 1050367		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aromatic Hydrocarbon (C16-C21)	106	12.1	151.3	0	70.1	70	130				
Aromatic Hydrocarbon (C21-C34)	125	12.1	151.3	0	82.4	70	130				

Work Order: 1907338

CLIENT: Apex Laboratories

Project: A9G0676

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 1907338-002AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 7/30/2019		RunNo: 53106			
Client ID: DP-1(11-12.5)		Batch ID: 25343				Analysis Date: 8/8/2019		SeqNo: 1050367			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	82.7		121.0		68.3	60	140				

Sample ID: 1907338-002AMSD	SampType: MSD	Units: mg/Kg-dry			Prep Date: 7/30/2019			RunNo: 53106			
Client ID: DP-1(11-12.5)	Batch ID: 25343				Analysis Date: 8/8/2019			SeqNo: 1050368			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C12-C16)	121	13.1	163.4	0	73.8	70	130	92.61	26.2	30	
Aromatic Hydrocarbon (C16-C21)	119	13.1	163.4	0	72.5	70	130	106.1	11.1	30	
Aromatic Hydrocarbon (C21-C34)	120	13.1	163.4	0	73.2	70	130	124.6	4.04	30	
Surr: o-Terphenyl	92.3		130.8		70.6	60	140		0		



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCS-25324	SampType: LCS	Units: mg/Kg				Prep Date: 7/29/2019			RunNo: 52983		
Client ID: LCSS	Batch ID: 25324	Analysis Date: 7/29/2019							SeqNo: 1046786		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	33.3	1.75	30.00	0	111	70	130				
Aliphatic Hydrocarbon (C6-C8)	9.95	2.50	10.00	0	99.5	70	130				
Aliphatic Hydrocarbon (C8-C10)	9.78	1.40	10.00	0	97.8	70	130				
Aliphatic Hydrocarbon (C10-C12)	9.90	1.50	10.00	0	99.0	70	130				
Aromatic Hydrocarbon (C8-C10)	44.1	3.00	40.00	0	110	70	130				
Aromatic Hydrocarbon (C10-C12)	11.3	0.600	10.00	0	113	70	130				
Aromatic Hydrocarbon (C12-C13)	13.1	7.00	10.00	0	131	70	130				S
Surr: 1,4-Difluorobenzene	2.63		2.500		105	65	140				
Surr: Bromofluorobenzene	2.74		2.500		109	65	140				

NOTES:

S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.

Sample ID: MB-25324	SampType: MBLK	Units: mg/Kg				Prep Date: 7/29/2019			RunNo: 52983		
Client ID: MBLKS	Batch ID: 25324	Analysis Date: 7/29/2019							SeqNo: 1046787		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	1.75		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	2.50		0	0						
Aliphatic Hydrocarbon (C8-C10)	ND	1.40		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	1.50		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	3.00		0	0						
Aromatic Hydrocarbon (C10-C12)	ND	0.600		0	0						
Aromatic Hydrocarbon (C12-C13)	ND	7.00		0	0						
Surr: 1,4-Difluorobenzene	2.51		2.500		100	65	140				
Surr: Bromofluorobenzene	2.62		2.500		105	65	140				

Sample ID: 1907338-046BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/29/2019		RunNo: 52983			
Client ID: DP-13(5-6.5)		Batch ID: 25324				Analysis Date: 7/30/2019		SeqNo: 1046783			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	1.93		0	0			0		25	

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: 1907338-046BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: DP-13(5-6.5)		Batch ID: 25324				Analysis Date: 7/30/2019			SeqNo: 1046783		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C6-C8)	ND	2.76		0	0			0		25	
Aliphatic Hydrocarbon (C8-C10)	2.31	1.55		0	0			1.830	23.1	25	
Aliphatic Hydrocarbon (C10-C12)	8.02	1.66		0	0			9.888	20.8	25	
Aromatic Hydrocarbon (C8-C10)	ND	3.32		0	0			0		25	
Aromatic Hydrocarbon (C10-C12)	10.6	0.663		0	0			10.43	1.28	25	
Aromatic Hydrocarbon (C12-C13)	12.9	7.74		0	0			11.77	9.42	25	*
Surr: 1,4-Difluorobenzene	2.62		2.763		94.7	65	140		0		
Surr: Bromofluorobenzene	2.61		2.763		94.5	65	140		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID: 1907320-001AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: BATCH		Batch ID: 25324					Analysis Date: 7/30/2019			SeqNo: 1046773	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	20.6	1.20	20.61	0	99.9	70	130				
Aliphatic Hydrocarbon (C6-C8)	25.5	1.72	6.869	13.37	176	70	130				S
Aliphatic Hydrocarbon (C8-C10)	39.6	0.962	6.869	34.71	70.9	70	130				
Aliphatic Hydrocarbon (C10-C12)	45.5	1.03	6.869	38.82	96.9	70	130				
Aromatic Hydrocarbon (C8-C10)	63.1	2.06	27.48	37.51	93.2	70	130				
Aromatic Hydrocarbon (C10-C12)	53.2	0.412	6.869	45.56	111	70	130				E
Aromatic Hydrocarbon (C12-C13)	71.2	4.81	6.869	66.20	72.3	70	130				E
Surr: 1,4-Difluorobenzene	1.74		1.717		101	65	140				
Surr: Bromofluorobenzene	1.92		1.717		112	65	140				

NOTES:

S - Outlying spike recovery(ies) observed.

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

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: 1907320-001AMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 7/29/2019			RunNo: 52983		
Client ID: BATCH		Batch ID: 25324					Analysis Date: 7/30/2019			SeqNo: 1046774	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	20.6	1.20	20.61	0	99.9	70	130	20.58	0.0172	30	
Aliphatic Hydrocarbon (C6-C8)	25.4	1.72	6.869	13.37	175	70	130	25.48	0.387	30	S
Aliphatic Hydrocarbon (C8-C10)	39.5	0.962	6.869	34.71	69.6	70	130	39.58	0.231	30	S
Aliphatic Hydrocarbon (C10-C12)	45.7	1.03	6.869	38.82	99.6	70	130	45.48	0.396	30	
Aromatic Hydrocarbon (C8-C10)	63.6	2.06	27.48	37.51	95.0	70	130	63.13	0.765	30	
Aromatic Hydrocarbon (C10-C12)	52.0	0.412	6.869	45.56	93.3	70	130	53.21	2.36	30	E
Aromatic Hydrocarbon (C12-C13)	74.4	4.81	6.869	66.20	119	70	130	71.17	4.43	30	E
Surr: 1,4-Difluorobenzene	1.71		1.717		99.4	65	140		0		
Surr: Bromofluorobenzene	1.84		1.717		107	65	140		0		

NOTES:

S - Outlying spike recovery(ies) observed.

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

Sample ID: LCS-25370		SampType: LCS		Units: mg/Kg		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: LCSS		Batch ID: 25370					Analysis Date: 8/1/2019			SeqNo: 1049215	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	31.5	1.75	30.00	0	105	70	130				
Aliphatic Hydrocarbon (C6-C8)	9.51	2.50	10.00	0	95.1	70	130				
Aliphatic Hydrocarbon (C8-C10)	9.09	1.40	10.00	0	90.9	70	130				
Aliphatic Hydrocarbon (C10-C12)	10.2	1.50	10.00	0	102	70	130				
Aromatic Hydrocarbon (C8-C10)	44.7	3.00	40.00	0	112	70	130				
Aromatic Hydrocarbon (C10-C12)	9.19	0.600	10.00	0	91.9	70	130				
Aromatic Hydrocarbon (C12-C13)	11.5	7.00	10.00	0	115	70	130				
Surr: 1,4-Difluorobenzene	2.73		2.500		109	65	140				
Surr: Bromofluorobenzene	2.77		2.500		111	65	140				



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCSD-25370		SampType: LCSD			Units: mg/Kg		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: LCSS02		Batch ID: 25370			Analysis Date: 8/1/2019			SeqNo: 1049216				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C5-C6)	31.1	1.75	30.00	0	104	70	130	31.49	1.28	20	
Aliphatic Hydrocarbon (C6-C8)	8.95	2.50	10.00	0	89.5	70	130	9.509	6.09	20	
Aliphatic Hydrocarbon (C8-C10)	9.59	1.40	10.00	0	95.9	70	130	9.089	5.32	20	
Aliphatic Hydrocarbon (C10-C12)	11.1	1.50	10.00	0	111	70	130	10.21	8.21	20	
Aromatic Hydrocarbon (C8-C10)	45.2	3.00	40.00	0	113	70	130	44.66	1.29	20	
Aromatic Hydrocarbon (C10-C12)	8.53	0.600	10.00	0	85.3	70	130	9.192	7.46	20	
Aromatic Hydrocarbon (C12-C13)	10.4	7.00	10.00	0	104	70	130	11.52	10.6	20	
Surr: 1,4-Difluorobenzene	2.73		2.500		109	65	140		0		
Surr: Bromofluorobenzene	2.72		2.500		109	65	140		0		

Sample ID: MB-25370		SampType: MBLK			Units: mg/Kg		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: MBLKS		Batch ID: 25370			Analysis Date: 8/1/2019			SeqNo: 1049217				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C5-C6)	ND	1.75		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	2.50		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	1.50		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	3.00		0	0						
Surr: 1,4-Difluorobenzene	2.55		2.500		102	65	140				
Surr: Bromofluorobenzene	2.66		2.500		106	65	140				

Sample ID: 1907338-008BDUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 8/1/2019			RunNo: 53100		
Client ID: DP-2(21-22.5)		Batch ID: 25370			Analysis Date: 8/2/2019			SeqNo: 1049209				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C5-C6)	ND	1.96		0	0			0		25	H
Aliphatic Hydrocarbon (C6-C8)	ND	2.81		0	0			0		25	H
Aliphatic Hydrocarbon (C10-C12)	ND	1.68		0	0			0		25	H
Aromatic Hydrocarbon (C8-C10)	ND	3.37		0	0			0		25	H
Surr: 1,4-Difluorobenzene	2.85		2.805		102	65	140		0		H



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: 1907338-008BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 8/1/2019			RunNo: 53100			
Client ID: DP-2(21-22.5)		Batch ID: 25370					Analysis Date: 8/2/2019			SeqNo: 1049209		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Surr: Bromofluorobenzene	2.90		2.805		103	65	140		0		H

Sample ID: LCS-25436		SampType: LCS			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: LCSS		Batch ID: 25436			Analysis Date: 8/8/2019			SeqNo: 1050701				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	9.60	1.40	10.00	0	96.0	70	130				
Aromatic Hydrocarbon (C10-C12)	10.1	0.600	10.00	0	101	70	130				
Aromatic Hydrocarbon (C12-C13)	9.89	7.00	10.00	0	98.9	70	130				
Surr: 1,4-Difluorobenzene	2.66		2.500		107	65	140				
Surr: Bromofluorobenzene	2.54		2.500		101	65	140				

Sample ID: LCSD-25436		SampType: LCSD			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: LCSS02		Batch ID: 25436			Analysis Date: 8/8/2019			SeqNo: 1050703				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	9.83	1.40	10.00	0	98.3	70	130	9.602	2.40	20	
Aromatic Hydrocarbon (C10-C12)	9.64	0.600	10.00	0	96.4	70	130	10.15	5.07	20	
Aromatic Hydrocarbon (C12-C13)	10.1	7.00	10.00	0	101	70	130	9.887	2.36	20	
Surr: 1,4-Difluorobenzene	2.64		2.500		105	65	140		0		
Surr: Bromofluorobenzene	2.49		2.500		99.4	65	140		0		

Sample ID: MB-25436		SampType: MBLK			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: MBLKS		Batch ID: 25436			Analysis Date: 8/8/2019			SeqNo: 1050705				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Aliphatic Hydrocarbon (C8-C10)	ND	1.40		0	0						
Aromatic Hydrocarbon (C10-C12)	ND	0.600		0	0						
Aromatic Hydrocarbon (C12-C13)	ND	7.00		0	0						



Date: 8/21/2019

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: MB-25436		SampType: MBLK			Units: mg/Kg		Prep Date: 8/8/2019			RunNo: 53165		
Client ID: MBLKS		Batch ID: 25436			Analysis Date: 8/8/2019			SeqNo: 1050705				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Sample ID: 1907338-043BDUP	SampType: DUP	Units: mg/Kg-dry			Prep Date: 8/8/2019			RunNo: 53165			
Client ID: DP-12(10-11.5)	Batch ID: 25436				Analysis Date: 8/9/2019			SeqNo: 1050692			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	1.49		0	0			0		25	H
Aromatic Hydrocarbon (C10-C12)	ND	0.639		0	0			0		25	H
Aromatic Hydrocarbon (C12-C13)	ND	7.46		0	0			0		25	H
Surr: 1,4-Difluorobenzene	2.60		2.663		97.4	65	140		0		H
Surr: Bromofluorobenzene	2.49		2.663		93.6	65	140		0		H

Work Order: 1907338
CLIENT: Apex Laboratories
Project: A9G0676

QC SUMMARY REPORT

Sample Moisture (Percent Moisture)

Sample ID: 1907338-010ADUP		SampType: DUP			Units: wt%		Prep Date: 7/25/2019			RunNo: 52882		
Client ID: DP-3(10-11.5)		Batch ID: R52882						Analysis Date: 7/25/2019			SeqNo: 1045085	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Percent Moisture	20.2	0.500						20.38	0.720	20	

Sample ID: 1907340-002ADUP		SampType: DUP			Units: wt%		Prep Date: 7/25/2019			RunNo: 52882		
Client ID: BATCH		Batch ID: R52882			Analysis Date: 7/25/2019			SeqNo: 1045093				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Percent Moisture	7.08	0.500						6.087	15.1	20	

Sample ID: 1908038-001ADUP		SampType: DUP			Units: wt%		Prep Date: 8/2/2019			RunNo: 53032		
Client ID: BATCH		Batch ID: R53032			Analysis Date: 8/2/2019			SeqNo: 1047742				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Percent Moisture	5.02	0.500						6.007	17.8	20	

Sample ID: 1908034-001ADUP		SampType: DUP			Units: wt%		Prep Date: 8/2/2019			RunNo: 53032		
Client ID: BATCH		Batch ID: R53032			Analysis Date: 8/2/2019			SeqNo: 1047750				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Percent Moisture	68.9	0.500						67.50	2.09	20	

Client Name: **APEX**
 Logged by: **Clare Griggs**

Work Order Number: **1907338**
 Date Received: **7/25/2019 9:49:00 AM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: Date:
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp $^{\circ}\text{C}$
Cooler 1	7.8
Cooler 2	2.4
Sample 1	5.4
Sample 2	3.4
Temp Blank 1	2.8

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

Client Name: **APEX**Work Order Number: **1907338**Logged by: **Clare Griggs**Date Received: **7/25/2019 9:49:00 AM**

Item #	Temp °C
Temp Blank 2	4.8

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338

7/23/19
JS 7/24/19SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

HOLD

Sample Name: DP-1(5-6.5) Soil Sampled: 07/18/19 10:25 (A9G0676-01)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(11-12.5) Soil Sampled: 07/18/19 10:32 (A9G0676-02)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 10:32	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 10:32	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-1(15-16.5) Soil Sampled: 07/18/19 10:40 (A9G0676-03)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

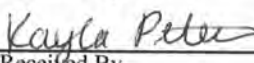
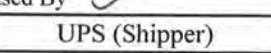
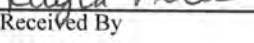
HOLD

Sample Name: DP-1(21-22.5) Soil Sampled: 07/18/19 10:50 (A9G0676-04)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:50	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking #: 1Z X4720R 019205 4223

Released By  Date 7/24/19
 Received By  Date 7/25/19 0949
 Released By  Date
 Received By  Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907330

Sample Name: DP-1(27.5-29)

HOLD

Soil

Sampled: 07/18/19 11:00

(A9G0676-05)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:00	Hold for potential EPH/VPH

Sample Name: DP-2(11-12.5)

Soil

Sampled: 07/18/19 11:15

(A9G0676-06)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub) NWTPH-VPH (Sub) <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/02/19 17:00 08/02/19 17:00	08/01/19 11:15 08/01/19 11:15	

Sample Name: DP-2(16.5-18)

HOLD

Soil

Sampled: 07/18/19 11:20

(A9G0676-07)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:20	Hold for potential EPH/VPH

Sample Name: DP-2(21-22.5)

Soil

Sampled: 07/18/19 11:35

(A9G0676-08)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:35	Hold for potential EPH/VPH

Sample Name: DP-2(25-26.5)

HOLD

Soil

Sampled: 07/18/19 11:40

(A9G0676-09)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 11:40	Hold for potential EPH/VPH

Standard TAT

Tracking# 12X4720R0192054223

AS

7/24/19

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peterson	7/25/19 6949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

Sample Name: DP-3(10-11.5) **Soil** **Sampled:** 07/18/19 12:00 (A9G0676-10)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 12:00	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 12:00	✓
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-3(22-23.5) **Soil** **Sampled:** 07/18/19 12:18 (A9G0676-11)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 12:18	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-4(6.5-8) **Soil** **Sampled:** 07/19/19 08:20 (A9G0676-12)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-4(11.5-13) **Soil** **Sampled:** 07/19/19 08:25 (A9G0676-13)

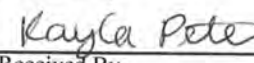
Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:25	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-4(16.5-18) **Soil** **Sampled:** 07/19/19 08:30 (A9G0676-14)

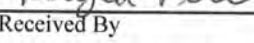
Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:30	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 1ZX4720R0192054223

Released By  Date 7/24/19

Received By  Date 7/25/19 0949

Released By  Date

Received By  Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-5(6-7.5)

Soil

Sampled: 07/19/19 08:47

(A9G0676-15)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:47	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-5(10-11.5)

Soil

Sampled: 07/19/19 08:55

(A9G0676-16)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 08:55	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 08:55	
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-5(15-16.5)

Soil

Sampled: 07/19/19 09:00

(A9G0676-17)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(2-3.5)

Soil

Sampled: 07/19/19 09:10

(A9G0676-18)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(6.5-8)

Soil

Sampled: 07/19/19 09:15

(A9G0676-19)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:15	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 1Z X4720R01 92054223

Released By	Date	Received By	Date
	7/24/19	UPS (Shipper)	
UPS (Shipper)		Kayla Peterson	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338 7/23/19

Sample Name: DP-6(12-13.5) **Soil** **Sampled:** 07/19/19 09:20 (A9G0676-20)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:20	Hold for potential EPH/VPH

HOLD

Sample Name: DP-6(17-18.5) **Soil** **Sampled:** 07/19/19 09:25 (A9G0676-21)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:25	Hold for potential EPH/VPH

HOLD

Sample Name: DP-7(1-2.5) **Soil** **Sampled:** 07/19/19 09:30 (A9G0676-22)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:30	Hold for potential EPH/VPH

HOLD

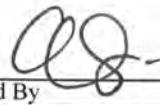
Sample Name: DP-7(6.5-8) **Soil** **Sampled:** 07/19/19 09:35 (A9G0676-23)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:35	Hold for potential EPH/VPH

Sample Name: DP-7(11.5-13) **Soil** **Sampled:** 07/19/19 09:40 (A9G0676-24)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 09:40	Hold for potential EPH/VPH

Standard TAT Tracking #: 1Z X4720R 0192054223

Released By	Date	Received By	Date
 UPS (Shipper)	7/24/19	 Kayla Peto	7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-7(16.5-18)

Soil

Sampled: 07/19/19 09:45

(A9G0676-25)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:45

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(1.5-3)

Soil

Sampled: 07/19/19 09:50

(A9G0676-26)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:50

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(6.5-8)

Soil

Sampled: 07/19/19 09:55

(A9G0676-27)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:55

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Sample Name: DP-8(11.5-13)

Soil

Sampled: 07/19/19 09:58

(A9G0676-28)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:58

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(17-18.5)

Soil

Sampled: 07/19/19 10:00

(A9G0676-29)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:00

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Standard TAT Tracking #: 1Z4720E 0192054223
Frag
apx 7/24/19

UPS (Shipper)

Released By

Date

Received By

Date

UPS (Shipper)

Released By

Date

Received By

Date

Kanya Peter

7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-9(1-2.5) Soil Sampled: 07/19/19 10:10 (A9G0676-30)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:10	Hold for potential EPH/VPH

HOLD

Sample Name: DP-9(6.5-8) Soil Sampled: 07/19/19 10:15 (A9G0676-31)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:15	Hold for potential EPH/VPH

HOLD

Sample Name: DP-9(11-12.5) Soil Sampled: 07/19/19 10:20 (A9G0676-32)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:20	Hold for potential EPH/VPH

HOLD

Sample Name: DP-9(16.5-18) Soil Sampled: 07/19/19 10:25 (A9G0676-33)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:25	Hold for potential EPH/VPH

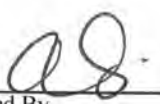
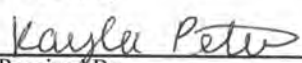
HOLD

Sample Name: DP-10(1.5-3) Soil Sampled: 07/19/19 10:30 (A9G0676-34)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 10:30	Hold for potential EPH/VPH

Standard TAT

Tracking#1Z44720R0192054223

Released By  Date 7/24/19
UPS (Shipper)
Received By  Date 7/25/19 0949
UPS (Shipper)

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

4oz Jar Reads BCSAmerica-1-01-2 on Project 8

Sample Name: DP-10(6-7.5)

Soil

Sampled: 07/19/19 10:35

(A9G0676-35)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:35	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(11.5-13)

Soil

Sampled: 07/19/19 10:40

(A9G0676-36)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(16.5-18)

Soil

Sampled: 07/19/19 10:45

(A9G0676-37)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:45	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Label Reads DP-11(5-7.5) on Jars.

Sample Name: DP-11(6-7.5)

Soil

Sampled: 07/19/19 10:50

(A9G0676-38)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:50	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:50	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-11(10-11.5)

Soil

Sampled: 07/19/19 10:55

(A9G0676-39)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:55	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking #: 1Z X4720R 0192 054223

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Peter	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-11(16.5-18)

Soil

Sampled: 07/19/19 11:00

(A9G0676-40)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(0.5-2)

Soil

Sampled: 07/19/19 11:10

(A9G0676-41)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-12(5-6.5)

Soil

Sampled: 07/19/19 11:15

(A9G0676-42)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:15	✓
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:15	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(10-11.5)

Soil

Sampled: 07/19/19 11:20

(A9G0676-43)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(16.5-18)

Soil

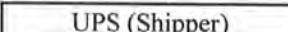
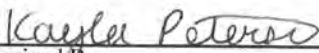
Sampled: 07/19/19 11:25

(A9G0676-44)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:25	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1ZEX472OR0192054223

Released By	Date	Received By	Date
	7/24/19		
UPS (Shipper)			
Released By	Date	Received By	Date
			7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-13(1.5-3)

Soil

Sampled: 07/19/19 11:30

(A9G0676-45)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:30	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-13(5-6.5)

Soil

Sampled: 07/19/19 11:35

(A9G0676-46)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:35	
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-13(10-11.5)

Soil

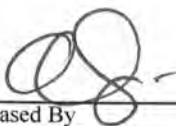
Sampled: 07/19/19 11:40

(A9G0676-47)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:40	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1Z4720R0192054223

	7/24/19	UPS (Shipper)	
Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peters	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338

7/22/19
JS 7/24/19SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

edits per PN 7 8/1/2019 pm

Sample Name: DP-1(5-6.5) **Soil** **Sampled:** 07/18/19 10:25 **HOLD** (A9G0676-01)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A) 4 oz Glass Jar (E) 40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 10:25	Hold for potential EPH/VPH

Sample Name: DP-1(11-12.5) **Soil** **Sampled:** 07/18/19 10:32 **HOLD** (A9G0676-02)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 10:32	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 10:32	
<i>Containers Supplied:</i> (A) 4 oz Glass Jar (E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(15-16.5) **Soil** **Sampled:** 07/18/19 10:40 **HOLD** (A9G0676-03)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A) 4 oz Glass Jar (E) 40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 10:40	Hold for potential EPH/VPH

Sample Name: DP-1(21-22.5) **Soil** **Sampled:** 07/18/19 10:50 **HOLD** (A9G0676-04)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A) 4 oz Glass Jar (E) 40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/14/20 10:50	Hold for potential EPH/VPH

Standard TAT

Tracking #: 1Z X4720R 0192054223

UPS (Shipper)

Released By

Date

Received By

Date

UPS (Shipper)

Kayla Peter

7/25/19 0949

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

HOLD

Sample Name: DP-1(27.5-29)

Soil

Sampled: 07/18/19 11:00

(A9G0676-05)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-2(11-12.5)

Soil

Sampled: 07/18/19 11:15

(A9G0676-06)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 11:15	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 11:15	
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-2(16.5-18)

Soil

Sampled: 07/18/19 11:20

(A9G0676-07)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-2(21-22.5)

Soil

Sampled: 07/18/19 11:35

(A9G0676-08)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:35	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-2(25-26.5)

Soil

Sampled: 07/18/19 11:40

(A9G0676-09)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 11:40	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking# 12X4720R0192054223

as

7/24/19

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peterson	7/25/19 6949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

Sample Name: DP-3(10-11.5)

Soil

Sampled: 07/18/19 12:00

(A9G0676-10)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 12:00	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 12:00	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-3(22-23.5)

Soil

Sampled: 07/18/19 12:18

(A9G0676-11)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 12:18	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-4(6.5-8)

Soil

Sampled: 07/19/19 08:20

(A9G0676-12)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:20	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-4(11.5-13)

Soil

Sampled: 07/19/19 08:25

(A9G0676-13)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-4(16.5-18)

Soil

Sampled: 07/19/19 08:30

(A9G0676-14)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:30	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 12X4720R0192054223

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Pete	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-5(6-7.5)

Soil

Sampled: 07/19/19 08:47

(A9G0676-15)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 08:47	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-5(10-11.5)

Soil

Sampled: 07/19/19 08:55

(A9G0676-16)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 08:55	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 08:55	✓
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-5(15-16.5)

Soil

Sampled: 07/19/19 09:00

(A9G0676-17)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(2-3.5)

Soil

Sampled: 07/19/19 09:10

(A9G0676-18)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(6.5-8)

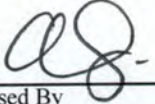
Soil

Sampled: 07/19/19 09:15

(A9G0676-19)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:15	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking#: 1Z X4720R01 92054223

Released By	Date	Received By	Date
	7/24/19	UPS (Shipper)	
Released By	Date	Received By	Date
UPS (Shipper)		Kayla Peterson	7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338 7/23/19

Sample Name: DP-6(12-13.5) Soil Sampled: 07/19/19 09:20 (A9G0676-20)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:20	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-6(17-18.5) Soil Sampled: 07/19/19 09:25 (A9G0676-21)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:25	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-7(1-2.5) Soil Sampled: 07/19/19 09:30 (A9G0676-22)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:30	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-7(6.5-8) Soil Sampled: 07/19/19 09:35 (A9G0676-23)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:35	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-7(11.5-13) Soil Sampled: 07/19/19 09:40 (A9G0676-24)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 09:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT Tracking #: 1Z X4720R 0192054223

Released By	7/24/19	UPS (Shipper)	Received By	7/25/19 0949
Released By			Received By	

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-7(16.5-18)

Soil

Sampled: 07/19/19 09:45

(A9G0676-25)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:45

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(1.5-3)

Soil

Sampled: 07/19/19 09:50

(A9G0676-26)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:50

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(6.5-8)

Soil

Sampled: 07/19/19 09:55

(A9G0676-27)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:55

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(11.5-13)

Soil

Sampled: 07/19/19 09:58

(A9G0676-28)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 09:58

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-8(17-18.5)

Soil

Sampled: 07/19/19 10:00

(A9G0676-29)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:00

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Standard TAT Tracking #: 1Z X4720R 0192054223
Frage
apx7/24/19

UPS (Shipper)

Released By

Date

Received By

Date

UPS (Shipper)

Released By

Date

Received By

Date

Kayla Peter

7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

7/23/19

1907338

HOLD

Sample Name: DP-9(1-2.5)

Soil

Sampled: 07/19/19 10:10

(A9G0676-30)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:10

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-9(6.5-8)

Soil

Sampled: 07/19/19 10:15

(A9G0676-31)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:15

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-9(11-12.5)

Soil

Sampled: 07/19/19 10:20

(A9G0676-32)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:20

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-9(16.5-18)

Soil

Sampled: 07/19/19 10:25

(A9G0676-33)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:25

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

HOLD

Sample Name: DP-10(1.5-3)

Soil

Sampled: 07/19/19 10:30

(A9G0676-34)

Analysis

Due

Expires

Comments

Subcontract Outside

08/01/19 17:00

01/15/20 10:30

Hold for potential EPH/VPH

Containers Supplied:

(A)4 oz Glass Jar

(E)40 mL VOA - 5035 (MeOH)

Standard TAT

Tracking# 1Z X472 0R01 9205 4223

Released By
Date
UPS (Shipper)

7/24/19

Date

UPS (Shipper)

Received By

Date

Released By

Date

Received By

Date

7/25/19 0949

Page 49 of 53

Page 7 of 10

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

4oz Jar Reads BCSAmerica-1-01-2 on Project s

Sample Name: DP-10(6-7.5)

Soil

Sampled: 07/19/19 10:35

(A9G0676-35)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:35	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(11.5-13)

Soil

Sampled: 07/19/19 10:40

(A9G0676-36)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-10(16.5-18)

Soil

Sampled: 07/19/19 10:45

(A9G0676-37)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:45	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Label Reads DP-11(5-7.5) on Jars.

Sample Name: DP-11(6-7.5)

Soil

Sampled: 07/19/19 10:50

(A9G0676-38)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 10:50	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 10:50	✓
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-11(10-11.5)

Soil

Sampled: 07/19/19 10:55

(A9G0676-39)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 10:55	Hold for potential EPH/VPH
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Run EPH & VPH

Standard TAT

Tracking #: 1Z X472DR 0192 054223

UPS (Shipper)

Released By	Date	Received By	Date
UPS (Shipper)	7/24/19	Kayla Peter	7/25/19 0949
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-11(16.5-18)

Soil

Sampled: 07/19/19 11:00

(A9G0676-40)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:00	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(0.5-2)

Soil

Sampled: 07/19/19 11:10

(A9G0676-41)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:10	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Sample Name: DP-12(5-6.5)

Soil

Sampled: 07/19/19 11:15

(A9G0676-42)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:15	✓
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:15	
Containers Supplied:			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(10-11.5)

Soil

Sampled: 07/19/19 11:20

(A9G0676-43)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:20	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-12(16.5-18)

Soil

Sampled: 07/19/19 11:25

(A9G0676-44)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/15/20 11:25	Hold for potential EPH/VPH
<i>Containers Supplied:</i>			
(A)4 oz Glass Jar			
(E)40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking#: 1Z X472 0R 0192 054223

Released By

UPS (Shipper)

Date

Received By

Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

HOLD

Sample Name: DP-13(1.5-3)

Soil

Sampled: 07/19/19 11:30

(A9G0676-45)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 11:30	Hold for potential EPH/VPH

Sample Name: DP-13(5-6.5)

Soil

Sampled: 07/19/19 11:35

(A9G0676-46)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/02/19 11:35	
NWTPH-VPH (Sub)	08/02/19 17:00	08/02/19 11:35	
<i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)			

HOLD

Sample Name: DP-13(10-11.5)

Soil

Sampled: 07/19/19 11:40

(A9G0676-47)

Analysis	Due	Expires	Comments
Subcontract Outside <i>Containers Supplied:</i> (A)4 oz Glass Jar (E)40 mL VOA - 5035 (MeOH)	08/01/19 17:00	01/15/20 11:40	Hold for potential EPH/VPH Run EPH & VPH

Standard TAT

Tracking#: 1ZK4720R0192054223

Released By

Date

Received By

Date

UPS (Shipper)

UPS (Shipper)

Released By

Date

Received By

Date

Kayla Peters

7/25/19 0949

SUBCONTRACT ORDER

Apex Laboratories

A9G0676

1907338

7/23/19
JS 7/24/19SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

VPH - carbon ranges
only per PN 8/11/19 pm

edits per PN 7 8/1/2019 pm

Sample Name: DP-1(5-6.5)

HOLD

Soil Sampled: 07/18/19 10:25 (A9G0676-01)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:25	Hold for potential EPH/VPH
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(11-12.5)

Soil Sampled: 07/18/19 10:32 (A9G0676-02)

Analysis	Due	Expires	Comments
NWTPH-EPH (Sub)	08/02/19 17:00	08/01/19 10:32	
NWTPH-VPH (Sub)	08/02/19 17:00	08/01/19 10:32	
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(15-16.5)

HOLD

Soil Sampled: 07/18/19 10:40 (A9G0676-03)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:40	Hold for potential EPH/VPH
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Sample Name: DP-1(21-22.5)

HOLD

Soil Sampled: 07/18/19 10:50 (A9G0676-04)

Analysis	Due	Expires	Comments
Subcontract Outside	08/01/19 17:00	01/14/20 10:50	Hold for potential EPH/VPH
Containers Supplied:			
(A) 4 oz Glass Jar			
(E) 40 mL VOA - 5035 (MeOH)			

Standard TAT

Tracking # 12 X4720R 0192054223

UPS (Shipper)

Released By

Date

UPS (Shipper)

Received By

Date

Kayla Peter

7/25/19 0949

Released By

Date

Received By

Date



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

Thursday, August 29, 2019

Kyle Haggart

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

RE: A9G0664 - BCSAmerica-1-01-02 - [none]

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 A9G0664, which was received by the laboratory on 7/19/2019 at 3:03:00PM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1

2.5 degC

Cooler #2

1.0 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

Philip Nerenberg, Lab Director

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



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-GW-1	A9G0664-01	Water	07/18/19 10:00	07/19/19 15:03
DP-3W	A9G0664-02	Water	07/18/19 14:55	07/19/19 15:03
DP-2W	A9G0664-03	Water	07/18/19 16:35	07/19/19 15:03
DP-1W	A9G0664-04	Water	07/18/19 18:08	07/19/19 15:03
TP-GW-2	A9G0664-05	Water	07/18/19 12:00	07/19/19 15:03

Apex Laboratories

Philip Nerenberg, Lab Director

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.



AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL CASE NARRATIVE

Work Order: A9G0664

Amended Report Revision 1:

This report supersedes all previous reports.

Analysis of dissolved metals were added after the previous report version had been completed.

Philip Nerenberg

Lab Director

8/29/19

Apex Laboratories

A handwritten signature in black ink that reads "Philip Nerenberg".

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.

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

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
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071238			
Diesel	ND	0.0943	0.189	mg/L	1	07/25/19 01:22	NWTPH-Dx	
Oil	ND	0.189	0.377	mg/L	1	07/25/19 01:22	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/25/19 01:22</i>	<i>NWTPH-Dx</i>	
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071238			
Diesel	ND	0.0943	0.189	mg/L	1	07/25/19 01:45	NWTPH-Dx	
Oil	ND	0.189	0.377	mg/L	1	07/25/19 01:45	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/25/19 01:45</i>	<i>NWTPH-Dx</i>	
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071238			
Diesel	ND	0.0943	0.189	mg/L	1	07/25/19 02:08	NWTPH-Dx	
Oil	ND	0.189	0.377	mg/L	1	07/25/19 02:08	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 91 %</i>		<i>Limits: 50-150 %</i>	<i>1</i>	<i>07/25/19 02:08</i>	<i>NWTPH-Dx</i>	

Apex Laboratories

Philip Nerenberg, Lab Director

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



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

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
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071122			
Gasoline Range Organics	0.0588	0.0500	0.100	mg/L	1	07/22/19 16:02	NWTPH-Gx (MS)	J
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	95 %	Limits:	50-150 %	1	07/22/19 16:02	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			86 %		50-150 %	1	07/22/19 16:02	NWTPH-Gx (MS)
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071122			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/22/19 15:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	94 %	Limits:	50-150 %	1	07/22/19 15:05	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			86 %		50-150 %	1	07/22/19 15:05	NWTPH-Gx (MS)
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	07/22/19 15:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	93 %	Limits:	50-150 %	1	07/22/19 15:34	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			84 %		50-150 %	1	07/22/19 15:34	NWTPH-Gx (MS)

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-1 (A9G0664-01)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Benzene	ND	0.100	0.200	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-1 (A9G0664-01)				Matrix: Water		Batch: 9071122		
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 14:08	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 14:08	EPA 8260C	
4-Methyl-2-pentanone (MIBK)	ND	5.00	10.0	ug/L	1	07/22/19 14:08	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/22/19 14:08	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/22/19 14:08	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	07/22/19 14:08	EPA 8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-1 (A9G0664-01)		Matrix: Water			Batch: 9071122			
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 96 %	Limits: 80-120 %	1	07/22/19 14:08	EPA 8260C		
Toluene-d8 (Surr)		100 %	80-120 %	1	07/22/19 14:08	EPA 8260C		
4-Bromofluorobenzene (Surr)		103 %	80-120 %	1	07/22/19 14:08	EPA 8260C		
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 16:02	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 16:02	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071122			
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 16:02	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 16:02	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 16:02	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 16:02	EPA 8260C	
Tetrachloroethene (PCE)	16.6	0.200	0.400	ug/L	1	07/22/19 16:02	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 16:02	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 16:02	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/22/19 16:02</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 16:02</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 16:02</i>	<i>EPA 8260C</i>	
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 15:05	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071122			
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 15:05	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 15:05	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 15:05	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:05	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:05	EPA 8260C	
Tetrachloroethene (PCE)	10.5	0.200	0.400	ug/L	1	07/22/19 15:05	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:05	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 15:05	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/22/19 15:05</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 15:05</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 15:05</i>	<i>EPA 8260C</i>	

DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 15:34	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 15:34	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 15:34	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 15:34	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 15:34	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:34	EPA 8260C	
Tetrachloroethene (PCE)	0.601	0.200	0.400	ug/L	1	07/22/19 15:34	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	

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Philip Nerenberg

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071122			
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 15:34	EPA 8260C	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 15:34	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>07/22/19 15:34</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 15:34</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>	<i>1</i>	<i>07/22/19 15:34</i>	<i>EPA 8260C</i>	
TP-GW-2 (A9G0664-05)		Matrix: Water			Batch: 9071122			
Acetone	ND	20.0	20.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Acrylonitrile	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Benzene	ND	0.100	0.200	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromoform	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Bromomethane	ND	5.00	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Carbon disulfide	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Chloroethane	ND	5.00	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Chloromethane	ND	2.50	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Dibromomethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	

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Philip Nerenberg, Lab Director



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-2 (A9G0664-05)		Matrix: Water			Batch: 9071122			
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	07/22/19 14:37	EPA 8260C	
2-Hexanone	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Methylene chloride	ND	1.50	3.00	ug/L	1	07/22/19 14:37	EPA 8260C	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	07/22/19 14:37	EPA 8260C	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Styrene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-GW-2 (A9G0664-05)				Matrix: Water		Batch: 9071122		
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	07/22/19 14:37	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	07/22/19 14:37	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	07/22/19 14:37	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 97 %		Limits: 80-120 %	1	07/22/19 14:37	EPA 8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	07/22/19 14:37	EPA 8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	07/22/19 14:37	EPA 8260C	

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9080549			
Benzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Toluene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
cis-1,2-Dichloroethene	0.651	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Naphthalene	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Trichloroethene (TCE)	0.909	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	08/01/19 16:01	EPA 8260C SIM	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 70-130 %</i>	<i>1</i>	<i>08/01/19 16:01</i>	<i>EPA 8260C SIM</i>	
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>70-130 %</i>	<i>1</i>	<i>08/01/19 16:01</i>	<i>EPA 8260C SIM</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>70-130 %</i>	<i>1</i>	<i>08/01/19 16:01</i>	<i>EPA 8260C SIM</i>	

DP-2W (A9G0664-03)

Matrix: Water

Batch: 9080549

Benzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM
Toluene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM
Ethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM
m,p-Xylene	ND	0.100	0.200	ug/L	1	08/01/19 16:55	EPA 8260C SIM

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.9450 SW Commerce Circle
Wilsonville, OR 97070Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9080549			
o-Xylene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
cis-1,2-Dichloroethene	1.49	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
trans-1,2-Dichloroethene	0.0181	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	J
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Naphthalene	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Trichloroethene (TCE)	1.86	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	08/01/19 16:55	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	103 %	Limits:	70-130 %	1	08/01/19 16:55	EPA 8260C SIM
Toluene-d8 (Surr)			101 %		70-130 %	1	08/01/19 16:55	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			98 %		70-130 %	1	08/01/19 16:55	EPA 8260C SIM

DP-1W (A9G0664-04)		Matrix: Water			Batch: 9080549			
Benzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Toluene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
m,p-Xylene	ND	0.100	0.200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
o-Xylene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Chloroform	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)				Matrix: Water		Batch: 9080549		
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Naphthalene	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	08/01/19 17:49	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	104 %	Limits:	70-130 %	1	08/01/19 17:49	EPA 8260C SIM
Toluene-d8 (Surr)			100 %		70-130 %	1	08/01/19 17:49	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			99 %		70-130 %	1	08/01/19 17:49	EPA 8260C SIM

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water			Batch: 9071362		C-07	
Aroclor 1016	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1221	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1232	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1242	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1248	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1254	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1260	ND	0.0190	0.0381	ug/L	1	07/30/19 10:07	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 91 %		Limits: 40-135 %	1	07/30/19 10:07	EPA 8082A	
DP-2W (A9G0664-03)		Matrix: Water			Batch: 9071362		C-07	
Aroclor 1016	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1221	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1232	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1242	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1248	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1254	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Aroclor 1260	ND	0.0190	0.0381	ug/L	1	07/30/19 10:24	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 81 %		Limits: 40-135 %	1	07/30/19 10:24	EPA 8082A	
DP-1W (A9G0664-04)		Matrix: Water			Batch: 9071362		C-07	
Aroclor 1016	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1221	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1232	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1242	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1248	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1254	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Aroclor 1260	ND	0.0194	0.0388	ug/L	1	07/30/19 10:07	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		Recovery: 87 %		Limits: 40-135 %	1	07/30/19 10:07	EPA 8082A	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02RE2)				Matrix: Water		Batch: 9071208		
Acenaphthene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Acenaphthylene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Anthracene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Benz(a)anthracene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(a)pyrene	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Chrysene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Fluoranthene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Fluorene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	07/24/19 19:04	EPA 8270D	
Naphthalene	ND	0.0189	0.0377	ug/L	1	07/24/19 19:04	EPA 8270D	
Phenanthrene	0.0154	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	J
Pyrene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Carbazole	ND	0.0142	0.0283	ug/L	1	07/24/19 19:04	EPA 8270D	
Dibenzofuran	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Chlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dichlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dimethylphenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dinitrophenol	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Methylphenol	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Nitrophenol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
Phenol	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	

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Philip Nerenberg, Lab Director



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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02RE2)				Matrix: Water		Batch: 9071208		
2,3,5,6-Tetrachlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Butyl benzyl phthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Diethylphthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Dimethylphthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Di-n-butylphthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Di-n-octyl phthalate	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachlorobenzene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachlorobutadiene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
Hexachloroethane	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Chloronaphthalene	ND	0.00943	0.0189	ug/L	1	07/24/19 19:04	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Aniline	ND	0.0472	0.0943	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Chloroaniline	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
2-Nitroaniline	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
3-Nitroaniline	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
4-Nitroaniline	ND	0.189	0.377	ug/L	1	07/24/19 19:04	EPA 8270D	
Nitrobenzene	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	

Apex Laboratories

Philip Nerenberg, Lab Director

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EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02RE2)		Matrix: Water			Batch: 9071208			
2,6-Dinitrotoluene	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzoic acid	ND	1.18	2.36	ug/L	1	07/24/19 19:04	EPA 8270D	
Benzyl alcohol	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
Isophorone	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0236	0.0472	ug/L	1	07/24/19 19:04	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.472	0.943	ug/L	1	07/24/19 19:04	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,3-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
1,4-Dinitrobenzene	ND	0.236	0.472	ug/L	1	07/24/19 19:04	EPA 8270D	
Pyridine	ND	0.0943	0.189	ug/L	1	07/24/19 19:04	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	41 %	<i>Limits:</i>	44-120 %	1	07/24/19 19:04	EPA 8270D S-06
<i>2-Fluorobiphenyl (Surr)</i>			45 %		44-120 %	1	07/24/19 19:04	EPA 8270D
<i>Phenol-d6 (Surr)</i>			13 %		10-120 %	1	07/24/19 19:04	EPA 8270D
<i>p-Terphenyl-d14 (Surr)</i>			73 %		50-133 %	1	07/24/19 19:04	EPA 8270D
<i>2-Fluorophenol (Surr)</i>			22 %		19-120 %	1	07/24/19 19:04	EPA 8270D
<i>2,4,6-Tribromophenol (Surr)</i>			72 %		43-140 %	1	07/24/19 19:04	EPA 8270D Q-41
DP-2W (A9G0664-03RE2)		Matrix: Water			Batch: 9071294			
Acenaphthene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Acenaphthylene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Anthracene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Benz(a)anthracene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzo(a)pyrene	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Chrysene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Fluoranthene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Fluorene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
1-Methylnaphthalene	ND	0.0748	0.150	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Methylnaphthalene	ND	0.0748	0.150	ug/L	4	07/26/19 11:35	EPA 8270D	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03RE2)				Matrix: Water		Batch: 9071294		
Naphthalene	ND	0.0748	0.150	ug/L	4	07/26/19 11:35	EPA 8270D	
Phenanthrene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Pyrene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Carbazole	ND	0.0561	0.112	ug/L	4	07/26/19 11:35	EPA 8270D	
Dibenzofuran	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Chlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dichlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dimethylphenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dinitrophenol	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Methylphenol	ND	0.187	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Nitrophenol	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Nitrophenol	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Phenol	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
2,3,4,6-Tetrachlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Butyl benzyl phthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Diethylphthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Dimethylphthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Di-n-butylphthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Di-n-octyl phthalate	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03RE2)				Matrix: Water		Batch: 9071294		
Hexachlorobenzene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
Hexachlorobutadiene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
Hexachloroethane	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Chloronaphthalene	ND	0.0374	0.0748	ug/L	4	07/26/19 11:35	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Aniline	ND	0.187	0.374	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Chloroaniline	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
2-Nitroaniline	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
3-Nitroaniline	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
4-Nitroaniline	ND	0.748	1.50	ug/L	4	07/26/19 11:35	EPA 8270D	
Nitrobenzene	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
2,4-Dinitrotoluene	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
2,6-Dinitrotoluene	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzoic acid	ND	4.67	9.35	ug/L	4	07/26/19 11:35	EPA 8270D	
Benzyl alcohol	9.54	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
Isophorone	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0935	0.187	ug/L	4	07/26/19 11:35	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
3,3'-Dichlorobenzidine	ND	1.87	3.74	ug/L	4	07/26/19 11:35	EPA 8270D	Q-52
1,2-Dinitrobenzene	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
1,3-Dinitrobenzene	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
1,4-Dinitrobenzene	ND	0.935	1.87	ug/L	4	07/26/19 11:35	EPA 8270D	
Pyridine	ND	0.374	0.748	ug/L	4	07/26/19 11:35	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 40 %</i>		<i>Limits: 44-120 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>	<i>S-06</i>
<i>2-Fluorobiphenyl (Surr)</i>		<i>46 %</i>		<i>44-120 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>	
<i>Phenol-d6 (Surr)</i>		<i>14 %</i>		<i>10-120 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>	
<i>p-Terphenyl-d14 (Surr)</i>		<i>67 %</i>		<i>50-133 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>	
<i>2-Fluorophenol (Surr)</i>		<i>22 %</i>		<i>19-120 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-2W (A9G0664-03RE2)				Matrix: Water		Batch: 9071294		
<i>Surrogate: 2,4,6-Tribromophenol (Surr)</i>		<i>Recovery: 65 %</i>	<i>Limits: 43-140 %</i>	<i>4</i>	<i>07/26/19 11:35</i>	<i>EPA 8270D</i>		
DP-1W (A9G0664-04RE1)				Matrix: Water		Batch: 9071208		
Acenaphthene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Acenaphthylene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Anthracene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Benz(a)anthracene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(a)pyrene	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Chrysene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Fluoranthene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Fluorene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
1-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	07/24/19 19:40	EPA 8270D	
Naphthalene	ND	0.0187	0.0374	ug/L	1	07/24/19 19:40	EPA 8270D	
Phenanthrene	0.00976	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	J
Pyrene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Carbazole	ND	0.0140	0.0280	ug/L	1	07/24/19 19:40	EPA 8270D	
Dibenzofuran	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Chloro-3-methylphenol	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Chlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dichlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dimethylphenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dinitrophenol	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
4,6-Dinitro-2-methylphenol	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Methylphenol	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
3+4-Methylphenol(s)	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Nitrophenol	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Nitrophenol	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04RE1)		Matrix: Water			Batch: 9071208			
Phenol	0.207	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	J
2,3,4,6-Tetrachlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,3,5,6-Tetrachlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4,6-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Butyl benzyl phthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Diethylphthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Dimethylphthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Di-n-butylphthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
Di-n-octyl phthalate	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
N-Nitrosodimethylamine	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
N-Nitroso-di-n-propylamine	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
N-Nitrosodiphenylamine	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-Chloroethoxy) methane	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-Chloroethyl) ether	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2,2'-Oxybis(1-Chloropropane)	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachlorobenzene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachlorobutadiene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachlorocyclopentadiene	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
Hexachloroethane	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Chloronaphthalene	ND	0.00935	0.0187	ug/L	1	07/24/19 19:40	EPA 8270D	
1,2-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,3-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,4-Dichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,2,4-Trichlorobenzene	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Bromophenyl phenyl ether	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Chlorophenyl phenyl ether	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Aniline	ND	0.0467	0.0935	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Chloroaniline	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
2-Nitroaniline	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
3-Nitroaniline	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	
4-Nitroaniline	ND	0.187	0.374	ug/L	1	07/24/19 19:40	EPA 8270D	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04RE1)		Matrix: Water			Batch: 9071208			
Nitrobenzene	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
2,4-Dinitrotoluene	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
2,6-Dinitrotoluene	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
Benzoic acid	2.08	1.17	2.34	ug/L	1	07/24/19 19:40	EPA 8270D	J
Benzyl alcohol	0.524	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
Isophorone	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Azobenzene (1,2-DPH)	ND	0.0234	0.0467	ug/L	1	07/24/19 19:40	EPA 8270D	
Bis(2-Ethylhexyl) adipate	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
3,3'-Dichlorobenzidine	ND	0.467	0.935	ug/L	1	07/24/19 19:40	EPA 8270D	
1,2-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,3-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
1,4-Dinitrobenzene	ND	0.234	0.467	ug/L	1	07/24/19 19:40	EPA 8270D	
Pyridine	ND	0.0935	0.187	ug/L	1	07/24/19 19:40	EPA 8270D	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery:</i>	<i>41 %</i>	<i>Limits:</i>	<i>44-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>2-Fluorobiphenyl (Surr)</i>			<i>45 %</i>		<i>44-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>Phenol-d6 (Surr)</i>			<i>15 %</i>		<i>10-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>p-Terphenyl-d14 (Surr)</i>			<i>65 %</i>		<i>50-133 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>2-Fluorophenol (Surr)</i>			<i>21 %</i>		<i>19-120 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>
<i>2,4,6-Tribromophenol (Surr)</i>			<i>82 %</i>		<i>43-140 %</i>	<i>1</i>	<i>07/24/19 19:40</i>	<i>EPA 8270D</i>

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02) Matrix: Water								
Batch: 9071319								
Antimony	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Arsenic	0.647	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	J
Beryllium	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Chromium	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Copper	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/31/19 17:34	EPA 6020A	
Nickel	9.49	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Selenium	ND	0.500	1.00	ug/L	1	07/31/19 17:34	EPA 6020A	
Silver	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Thallium	ND	0.100	0.200	ug/L	1	07/31/19 17:34	EPA 6020A	
Zinc	ND	2.00	4.00	ug/L	1	07/31/19 17:34	EPA 6020A	
DP-2W (A9G0664-03) Matrix: Water								
Batch: 9071319								
Antimony	ND	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Arsenic	1.19	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Beryllium	ND	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Chromium	0.791	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	J
Copper	1.20	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Lead	0.237	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	07/31/19 17:38	EPA 6020A	
Nickel	2.56	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Selenium	ND	0.500	1.00	ug/L	1	07/31/19 17:38	EPA 6020A	
Silver	ND	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Thallium	ND	0.100	0.200	ug/L	1	07/31/19 17:38	EPA 6020A	
Zinc	4.03	2.00	4.00	ug/L	1	07/31/19 17:38	EPA 6020A	
DP-1W (A9G0664-04) Matrix: Water								
Batch: 9071319								
Antimony	ND	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-1W (A9G0664-04)		Matrix: Water						
Arsenic	9.61	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Beryllium	ND	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Cadmium	0.0577	0.0400	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	J
Chromium	0.713	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	J
Copper	10.2	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Lead	0.720	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Mercury	0.108	0.0400	0.0800	ug/L	1	07/31/19 18:05	EPA 6020A	
Nickel	8.35	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Selenium	ND	0.500	1.00	ug/L	1	07/31/19 18:05	EPA 6020A	
Silver	ND	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Thallium	ND	0.100	0.200	ug/L	1	07/31/19 18:05	EPA 6020A	
Zinc	9.10	2.00	4.00	ug/L	1	07/31/19 18:05	EPA 6020A	

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AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
DP-3W (A9G0664-02)		Matrix: Water						
Batch: 9081139								
Arsenic	0.525	0.500	1.00	ug/L	1	08/21/19 18:40	EPA 6020A (Diss)	J
Copper	ND	0.500	1.00	ug/L	1	08/21/19 18:40	EPA 6020A (Diss)	
Lead	ND	0.100	0.200	ug/L	1	08/21/19 18:40	EPA 6020A (Diss)	
DP-2W (A9G0664-03)		Matrix: Water						
Batch: 9081139								
Arsenic	1.15	0.500	1.00	ug/L	1	08/21/19 18:44	EPA 6020A (Diss)	
DP-1W (A9G0664-04)		Matrix: Water						
Batch: 9081139								
Arsenic	9.17	0.500	1.00	ug/L	1	08/21/19 18:48	EPA 6020A (Diss)	

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503-718-2323

EPA ID: OR01039**AMENDED REPORT****GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****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 9071238 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (9071238-BLK1)			Prepared: 07/24/19 12:59		Analyzed: 07/24/19 23:29							
NWTPH-Dx												
Diesel	ND	0.0909	0.182	mg/L	1	---	---	---	---	---	---	
Oil	ND	0.182	0.364	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
LCS (9071238-BS1)			Prepared: 07/24/19 12:59		Analyzed: 07/24/19 23:52							
NWTPH-Dx												
Diesel	1.17	0.100	0.200	mg/L	1	1.25	---	93	58-115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (9071238-BSD1)			Prepared: 07/24/19 12:59		Analyzed: 07/25/19 00:14							Q-19
NWTPH-Dx												
Diesel	1.19	0.100	0.200	mg/L	1	1.25	---	95	58-115%	2	20%	
Surr: o-Terphenyl (Surr)		Recovery: 103 %		Limits: 50-150 %		Dilution: 1x						

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503-718-2323

EPA ID: OR01039**AMENDED REPORT****GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****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 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)			Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:52									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	0.0500	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		80 %		50-150 %		"						
LCS (9071122-BS2)			Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:24									
NWTPH-Gx (MS)												
Gasoline Range Organics	0.485	0.0500	0.100	mg/L	1	0.500	---	97	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 93 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		95 %		50-150 %		"						
Duplicate (9071122-DUP1)			Prepared: 07/22/19 11:05 Analyzed: 07/22/19 18:24									V-01
QC Source Sample: Non-SDG (A9G0649-01)												
Gasoline Range Organics	1.78	0.500	1.00	mg/L	10	---	1.71	---	---	4	30%	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 95 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		85 %		50-150 %		"						

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AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)			Prepared: 07/22/19 07:00		Analyzed: 07/22/19 09:52							
EPA 8260C												
Acetone	ND	20.0	20.0	ug/L	1	---	---	---	---	---	---	
Acrylonitrile	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Bromobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Bromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromodichloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromoform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Bromomethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
n-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Carbon disulfide	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroethane	ND	5.00	5.00	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chloromethane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Dibromochloromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dibromomethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Blank (9071122-BLK1)						Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:52						
1,2-Dichloropropane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	2.50	5.00	ug/L	1	---	---	---	---	---	---	
2-Hexanone	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methylene chloride	ND	1.50	3.00	ug/L	1	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
n-Propylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Styrene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichlorofluoromethane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 95 % Limits: 80-120 % Dilution: 1x												

Apex Laboratories

Philip Nerenberg

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B												
Water												
Blank (9071122-BLK1)												
Prepared: 07/22/19 07:00 Analyzed: 07/22/19 09:52												
Surr: Toluene-d8 (Surr) Recovery: 100 % Limits: 80-120 % Dilution: 1x												
4-Bromofluorobenzene (Surr) 102 % 80-120 % "												
LCS (9071122-BS1)												
Prepared: 07/22/19 07:00 Analyzed: 07/22/19 08:55												
EPA 8260C												
Acetone	26.5	20.0	20.0	ug/L	1	40.0	---	66	80-120%	---	---	Q-55
Acrylonitrile	16.6	1.00	2.00	ug/L	1	20.0	---	83	80-120%	---	---	
Benzene	17.2	0.100	0.200	ug/L	1	20.0	---	86	80-120%	---	---	
Bromobenzene	19.9	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Bromochloromethane	16.5	0.500	1.00	ug/L	1	20.0	---	82	80-120%	---	---	
Bromodichloromethane	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Bromoform	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
Bromomethane	16.8	5.00	5.00	ug/L	1	20.0	---	84	80-120%	---	---	
2-Butanone (MEK)	32.3	5.00	10.0	ug/L	1	40.0	---	81	80-120%	---	---	
n-Butylbenzene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
sec-Butylbenzene	23.1	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
tert-Butylbenzene	22.6	0.500	1.00	ug/L	1	20.0	---	113	80-120%	---	---	
Carbon disulfide	18.4	5.00	10.0	ug/L	1	20.0	---	92	80-120%	---	---	
Carbon tetrachloride	20.7	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
Chlorobenzene	20.7	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Chloroethane	17.6	5.00	5.00	ug/L	1	20.0	---	88	80-120%	---	---	
Chloroform	19.1	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Chloromethane	16.0	2.50	5.00	ug/L	1	20.0	---	80	80-120%	---	---	
2-Chlorotoluene	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
4-Chlorotoluene	21.6	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Dibromochloromethane	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
1,2-Dibromo-3-chloropropane	19.5	2.50	5.00	ug/L	1	20.0	---	98	80-120%	---	---	
1,2-Dibromoethane (EDB)	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Dibromomethane	18.5	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,3-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	---	106	80-120%	---	---	
1,4-Dichlorobenzene	20.3	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Dichlorodifluoromethane	21.2	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
1,1-Dichloroethane	17.5	0.200	0.400	ug/L	1	20.0	---	87	80-120%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
LCS (9071122-BS1)						Prepared: 07/22/19 07:00 Analyzed: 07/22/19 08:55						
1,2-Dichloroethane (EDC)	18.8	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
1,1-Dichloroethene	17.7	0.200	0.400	ug/L	1	20.0	---	89	80-120%	---	---	
cis-1,2-Dichloroethene	17.6	0.200	0.400	ug/L	1	20.0	---	88	80-120%	---	---	
trans-1,2-Dichloroethene	17.9	0.200	0.400	ug/L	1	20.0	---	89	80-120%	---	---	
1,2-Dichloropropane	16.3	0.250	0.500	ug/L	1	20.0	---	81	80-120%	---	---	
1,3-Dichloropropane	19.5	0.500	1.00	ug/L	1	20.0	---	98	80-120%	---	---	
2,2-Dichloropropane	23.1	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
1,1-Dichloropropene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
cis-1,3-Dichloropropene	20.5	0.500	1.00	ug/L	1	20.0	---	102	80-120%	---	---	
trans-1,3-Dichloropropene	22.2	0.500	1.00	ug/L	1	20.0	---	111	80-120%	---	---	
Ethylbenzene	22.2	0.250	0.500	ug/L	1	20.0	---	111	80-120%	---	---	
Hexachlorobutadiene	22.9	2.50	5.00	ug/L	1	20.0	---	115	80-120%	---	---	
2-Hexanone	35.1	5.00	10.0	ug/L	1	40.0	---	88	80-120%	---	---	
Isopropylbenzene	23.2	0.500	1.00	ug/L	1	20.0	---	116	80-120%	---	---	
4-Isopropyltoluene	21.5	0.500	1.00	ug/L	1	20.0	---	108	80-120%	---	---	
Methylene chloride	18.0	1.50	3.00	ug/L	1	20.0	---	90	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	35.2	5.00	10.0	ug/L	1	40.0	---	88	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
Naphthalene	26.3	1.00	2.00	ug/L	1	20.0	---	132	80-120%	---	---	Q-56
n-Propylbenzene	20.8	0.250	0.500	ug/L	1	20.0	---	104	80-120%	---	---	
Styrene	20.8	0.500	1.00	ug/L	1	20.0	---	104	80-120%	---	---	
1,1,1,2-Tetrachloroethane	22.7	0.200	0.400	ug/L	1	20.0	---	114	80-120%	---	---	
1,1,2,2-Tetrachloroethane	16.8	0.250	0.500	ug/L	1	20.0	---	84	80-120%	---	---	
Tetrachloroethene (PCE)	23.2	0.200	0.400	ug/L	1	20.0	---	116	80-120%	---	---	
Toluene	20.0	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
1,2,3-Trichlorobenzene	24.1	1.00	2.00	ug/L	1	20.0	---	120	80-120%	---	---	
1,2,4-Trichlorobenzene	27.1	1.00	2.00	ug/L	1	20.0	---	135	80-120%	---	---	Q-56
1,1,1-Trichloroethane	20.5	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1,2-Trichloroethane	18.9	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Trichloroethene (TCE)	19.7	0.200	0.400	ug/L	1	20.0	---	99	80-120%	---	---	
Trichlorofluoromethane	22.3	1.00	2.00	ug/L	1	20.0	---	112	80-120%	---	---	
1,2,3-Trichloropropane	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	23.1	0.500	1.00	ug/L	1	20.0	---	115	80-120%	---	---	
1,3,5-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	---	117	80-120%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
LCS (9071122-BS1)			Prepared: 07/22/19 07:00		Analyzed: 07/22/19 08:55							
Vinyl chloride	17.0	0.200	0.400	ug/L	1	20.0	---	85	80-120%	---	---	
m,p-Xylene	47.8	0.500	1.00	ug/L	1	40.0	---	119	80-120%	---	---	
o-Xylene	23.0	0.250	0.500	ug/L	1	20.0	---	115	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

Duplicate (9071122-DUP1)

Prepared: 07/22/19 11:05 Analyzed: 07/22/19 18:24

V-01

QC Source Sample: Non-SDG (A9G0649-01)

Acetone	ND	200	200	ug/L	10	---	ND	---	---	---	30%
Acrylonitrile	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%
Benzene	2.21	1.00	2.00	ug/L	10	---	2.27	---	---	3	30%
Bromobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Bromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromodichloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromoform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Bromomethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%
2-Butanone (MEK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%
n-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
sec-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
tert-Butylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Carbon disulfide	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%
Carbon tetrachloride	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Chlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Chloroethane	ND	50.0	50.0	ug/L	10	---	ND	---	---	---	30%
Chloroform	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Chloromethane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%
2-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
4-Chlorotoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
Dibromochloromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dibromo-3-chloropropane	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%
Dibromomethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%
1,2-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%

Apex Laboratories

Philip Nerenberg

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Duplicate (9071122-DUP1)			Prepared: 07/22/19 11:05		Analyzed: 07/22/19 18:24		V-01					
QC Source Sample: Non-SDG (A9G0649-01)												
1,3-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	17.1	2.50	5.00	ug/L	10	---	17.0	---	---	0.4	30%	
Hexachlorobutadiene	ND	25.0	50.0	ug/L	10	---	ND	---	---	---	30%	
2-Hexanone	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Methylene chloride	ND	15.0	30.0	ug/L	10	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	34.8	10.0	20.0	ug/L	10	---	30.6	---	---	13	30%	Q-54
n-Propylbenzene	8.44	2.50	5.00	ug/L	10	---	7.96	---	---	6	30%	
Styrene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B												
Water												
Duplicate (9071122-DUP1)												
Prepared: 07/22/19 11:05 Analyzed: 07/22/19 18:24												
QC Source Sample: Non-SDG (A9G0649-01)												
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	94.0	5.00	10.0	ug/L	10	---	88.4	---	---	6	30%	
1,3,5-Trimethylbenzene	28.9	5.00	10.0	ug/L	10	---	27.0	---	---	7	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
m,p-Xylene	41.8	5.00	10.0	ug/L	10	---	40.8	---	---	2	30%	
o-Xylene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr) Recovery: 97 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr) 100 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr) 97 % 80-120 % "</i>												
Matrix Spike (9071122-MS1)												
Prepared: 07/22/19 11:05 Analyzed: 07/22/19 16:31												
QC Source Sample: DP-3W (A9G0664-02)												
EPA 8260C												
Acetone	28.6	20.0	20.0	ug/L	1	40.0	ND	72	39-160%	---	---	Q-54b
Acrylonitrile	17.2	1.00	2.00	ug/L	1	20.0	ND	86	63-135%	---	---	
Benzene	18.1	0.100	0.200	ug/L	1	20.0	ND	90	79-120%	---	---	
Bromobenzene	18.9	0.250	0.500	ug/L	1	20.0	ND	94	80-120%	---	---	
Bromochloromethane	17.9	0.500	1.00	ug/L	1	20.0	ND	90	78-123%	---	---	
Bromodichloromethane	19.7	0.500	1.00	ug/L	1	20.0	ND	99	79-125%	---	---	
Bromoform	22.2	0.500	1.00	ug/L	1	20.0	ND	111	66-130%	---	---	
Bromomethane	13.0	5.00	5.00	ug/L	1	20.0	ND	65	53-141%	---	---	
2-Butanone (MEK)	31.0	5.00	10.0	ug/L	1	40.0	ND	77	56-143%	---	---	
n-Butylbenzene	21.1	0.500	1.00	ug/L	1	20.0	ND	105	75-128%	---	---	
sec-Butylbenzene	22.6	0.500	1.00	ug/L	1	20.0	ND	113	77-126%	---	---	
tert-Butylbenzene	21.9	0.500	1.00	ug/L	1	20.0	ND	110	78-124%	---	---	
Carbon disulfide	20.3	5.00	10.0	ug/L	1	20.0	ND	101	64-133%	---	---	
Carbon tetrachloride	21.2	0.500	1.00	ug/L	1	20.0	ND	106	72-136%	---	---	
Chlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
Chloroethane	19.6	5.00	5.00	ug/L	1	20.0	ND	98	60-138%	---	---	
Chloroform	19.9	0.500	1.00	ug/L	1	20.0	ND	99	79-124%	---	---	
Chloromethane	19.2	2.50	5.00	ug/L	1	20.0	ND	96	50-139%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Matrix Spike (9071122-MS1)			Prepared: 07/22/19 11:05		Analyzed: 07/22/19 16:31							
QC Source Sample: DP-3W (A9G0664-02)												
2-Chlorotoluene	20.4	0.500	1.00	ug/L	1	20.0	ND	102	79-122%	---	---	
4-Chlorotoluene	20.9	0.500	1.00	ug/L	1	20.0	ND	105	78-122%	---	---	
Dibromochloromethane	22.0	0.500	1.00	ug/L	1	20.0	ND	110	74-126%	---	---	
1,2-Dibromo-3-chloropropane	18.3	2.50	5.00	ug/L	1	20.0	ND	91	62-128%	---	---	
1,2-Dibromoethane (EDB)	20.7	0.250	0.500	ug/L	1	20.0	ND	104	77-121%	---	---	
Dibromomethane	19.5	0.500	1.00	ug/L	1	20.0	ND	97	79-123%	---	---	
1,2-Dichlorobenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	105	80-120%	---	---	
1,3-Dichlorobenzene	21.2	0.250	0.500	ug/L	1	20.0	ND	106	80-120%	---	---	
1,4-Dichlorobenzene	19.9	0.250	0.500	ug/L	1	20.0	ND	99	79-120%	---	---	
Dichlorodifluoromethane	22.7	0.500	1.00	ug/L	1	20.0	ND	114	32-152%	---	---	
1,1-Dichloroethane	18.7	0.200	0.400	ug/L	1	20.0	ND	93	77-125%	---	---	
1,2-Dichloroethane (EDC)	19.5	0.200	0.400	ug/L	1	20.0	ND	98	73-128%	---	---	
1,1-Dichloroethene	19.0	0.200	0.400	ug/L	1	20.0	ND	95	71-131%	---	---	
cis-1,2-Dichloroethene	18.7	0.200	0.400	ug/L	1	20.0	0.530	91	78-123%	---	---	
trans-1,2-Dichloroethene	18.4	0.200	0.400	ug/L	1	20.0	ND	92	75-124%	---	---	
1,2-Dichloropropane	17.5	0.250	0.500	ug/L	1	20.0	ND	87	78-122%	---	---	
1,3-Dichloropropane	19.6	0.500	1.00	ug/L	1	20.0	ND	98	80-120%	---	---	
2,2-Dichloropropane	20.0	0.500	1.00	ug/L	1	20.0	ND	100	60-139%	---	---	
1,1-Dichloropropene	19.5	0.500	1.00	ug/L	1	20.0	ND	98	79-125%	---	---	
cis-1,3-Dichloropropene	17.8	0.500	1.00	ug/L	1	20.0	ND	89	75-124%	---	---	
trans-1,3-Dichloropropene	21.2	0.500	1.00	ug/L	1	20.0	ND	106	73-127%	---	---	
Ethylbenzene	22.3	0.250	0.500	ug/L	1	20.0	ND	111	79-121%	---	---	
Hexachlorobutadiene	22.2	2.50	5.00	ug/L	1	20.0	ND	111	66-134%	---	---	
2-Hexanone	34.3	5.00	10.0	ug/L	1	40.0	ND	86	57-139%	---	---	
Isopropylbenzene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	72-131%	---	---	
4-Isopropyltoluene	20.7	0.500	1.00	ug/L	1	20.0	ND	104	77-127%	---	---	
Methylene chloride	19.2	1.50	3.00	ug/L	1	20.0	ND	96	74-124%	---	---	
4-Methyl-2-pentanone (MiBK)	35.5	5.00	10.0	ug/L	1	40.0	ND	89	67-130%	---	---	
Methyl tert-butyl ether (MTBE)	18.9	0.500	1.00	ug/L	1	20.0	ND	94	71-124%	---	---	
Naphthalene	25.2	1.00	2.00	ug/L	1	20.0	ND	126	61-128%	---	---	Q-54
n-Propylbenzene	20.5	0.250	0.500	ug/L	1	20.0	ND	102	76-126%	---	---	
Styrene	20.7	0.500	1.00	ug/L	1	20.0	ND	104	78-123%	---	---	
1,1,1,2-Tetrachloroethane	21.9	0.200	0.400	ug/L	1	20.0	ND	110	78-124%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039**AMENDED REPORT****GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****QUALITY CONTROL (QC) SAMPLE RESULTS****Volatile Organic Compounds by EPA 8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071122 - EPA 5030B						Water						
Matrix Spike (9071122-MS1)			Prepared: 07/22/19 11:05		Analyzed: 07/22/19 16:31							
QC Source Sample: DP-3W (A9G0664-02)												
1,1,2,2-Tetrachloroethane	16.6	0.250	0.500	ug/L	1	20.0	ND	83	71-121%	---	---	Q-54a
Tetrachloroethene (PCE)	38.7	0.200	0.400	ug/L	1	20.0	16.6	110	74-129%	---	---	
Toluene	20.1	0.500	1.00	ug/L	1	20.0	ND	100	80-121%	---	---	
1,2,3-Trichlorobenzene	24.4	1.00	2.00	ug/L	1	20.0	ND	122	69-129%	---	---	
1,2,4-Trichlorobenzene	25.9	1.00	2.00	ug/L	1	20.0	ND	129	69-130%	---	---	
1,1,1-Trichloroethane	21.0	0.200	0.400	ug/L	1	20.0	ND	105	74-131%	---	---	
1,1,2-Trichloroethane	19.7	0.250	0.500	ug/L	1	20.0	ND	98	80-120%	---	---	
Trichloroethene (TCE)	21.1	0.200	0.400	ug/L	1	20.0	0.922	101	79-123%	---	---	
Trichlorofluoromethane	22.5	1.00	2.00	ug/L	1	20.0	ND	112	65-141%	---	---	
1,2,3-Trichloropropane	18.6	0.500	1.00	ug/L	1	20.0	ND	93	73-122%	---	---	
1,2,4-Trimethylbenzene	22.6	0.500	1.00	ug/L	1	20.0	ND	113	76-124%	---	---	Q-01
1,3,5-Trimethylbenzene	23.4	0.500	1.00	ug/L	1	20.0	ND	117	75-124%	---	---	
Vinyl chloride	19.1	0.200	0.400	ug/L	1	20.0	ND	96	58-137%	---	---	
m,p-Xylene	48.6	0.500	1.00	ug/L	1	40.0	ND	122	80-121%	---	---	
o-Xylene	22.6	0.250	0.500	ug/L	1	20.0	ND	113	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		92 %		80-120 %		"						

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
Blank (9080549-BLK1)			Prepared: 08/01/19 14:00 Analyzed: 08/01/19 15:34									
EPA 8260C SIM												
Benzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						

LCS (9080549-BS1)

Prepared: 08/01/19 14:00 Analyzed: 08/01/19 15:07

EPA 8260C SIM

Benzene	0.205	0.0500	0.100	ug/L	1	0.200	---	102	80-120%	---	---
Toluene	0.185	0.0500	0.100	ug/L	1	0.200	---	93	80-120%	---	---

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
LCS (9080549-BS1)			Prepared: 08/01/19 14:00		Analyzed: 08/01/19 15:07							
Ethylbenzene	0.182	0.0500	0.100	ug/L	1	0.200	---	91	80-120%	---	---	
m,p-Xylene	0.369	0.100	0.200	ug/L	1	0.400	---	92	80-120%	---	---	
o-Xylene	0.172	0.0500	0.100	ug/L	1	0.200	---	86	80-120%	---	---	
1,2,4-Trimethylbenzene	0.179	0.0500	0.100	ug/L	1	0.200	---	90	80-120%	---	---	
1,3,5-Trimethylbenzene	0.181	0.0500	0.100	ug/L	1	0.200	---	90	80-120%	---	---	
Chloroform	0.201	0.0500	0.100	ug/L	1	0.200	---	101	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.200	0.100	0.200	ug/L	1	0.200	---	100	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.188	0.0100	0.0200	ug/L	1	0.200	---	94	80-120%	---	---	
1,1-Dichloroethane	0.202	0.0100	0.0200	ug/L	1	0.200	---	101	80-120%	---	---	
1,2-Dichloroethane (EDC)	0.200	0.0100	0.0200	ug/L	1	0.200	---	100	80-120%	---	---	
1,1-Dichloroethene	0.195	0.0100	0.0200	ug/L	1	0.200	---	97	80-120%	---	---	
cis-1,2-Dichloroethene	0.201	0.0100	0.0200	ug/L	1	0.200	---	101	80-120%	---	---	
trans-1,2-Dichloroethene	0.198	0.0100	0.0200	ug/L	1	0.200	---	99	80-120%	---	---	
1,2-Dichloropropane	0.201	0.0100	0.0200	ug/L	1	0.200	---	101	80-120%	---	---	
cis-1,3-Dichloropropene	0.193	0.0100	0.0200	ug/L	1	0.200	---	97	80-120%	---	---	
trans-1,3-Dichloropropene	0.197	0.0100	0.0200	ug/L	1	0.200	---	99	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.191	0.0100	0.0200	ug/L	1	0.200	---	95	80-120%	---	---	
Naphthalene	0.181	0.0500	0.100	ug/L	1	0.200	---	91	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.206	0.0100	0.0200	ug/L	1	0.200	---	103	80-120%	---	---	
1,1,2-Trichloroethane	0.192	0.0100	0.0200	ug/L	1	0.200	---	96	80-120%	---	---	
Trichloroethene (TCE)	0.206	0.0100	0.0200	ug/L	1	0.200	---	103	80-120%	---	---	
1,2,3-Trichloropropane	0.202	0.0500	0.100	ug/L	1	0.200	---	101	80-120%	---	---	
Vinyl chloride	0.217	0.0100	0.0200	ug/L	1	0.200	---	109	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 102 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		96 %		70-130 %		"						

Duplicate (9080549-DUP1)

Prepared: 08/01/19 15:08 Analyzed: 08/01/19 16:27

QC Source Sample: DP-3W (A9G0664-02)

EPA 8260C SIM

Benzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
Toluene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
Ethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%
m,p-Xylene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
Duplicate (9080549-DUP1)			Prepared: 08/01/19 15:08		Analyzed: 08/01/19 16:27							
QC Source Sample: DP-3W (A9G0664-02)												
o-Xylene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
Chloroform	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	0.605	0.0100	0.0200	ug/L	1	---	0.651	---	---	7	30%	
trans-1,2-Dichloroethene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	0.903	0.0100	0.0200	ug/L	1	---	0.909	---	---	0.7	30%	
1,2,3-Trichloropropane	ND	0.0500	0.100	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 103 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		99 %		70-130 %		"						

Matrix Spike (9080549-MS1)

Prepared: 08/01/19 15:08 Analyzed: 08/01/19 18:16

QC Source Sample: DP-1W (A9G0664-04)

EPA 8260C SIM

Benzene	0.222	0.0500	0.100	ug/L	1	0.200	ND	111	79-120%	---	---	
Toluene	0.194	0.0500	0.100	ug/L	1	0.200	ND	97	80-121%	---	---	
Ethylbenzene	0.189	0.0500	0.100	ug/L	1	0.200	ND	94	79-121%	---	---	
m,p-Xylene	0.394	0.100	0.200	ug/L	1	0.400	ND	99	80-121%	---	---	
o-Xylene	0.182	0.0500	0.100	ug/L	1	0.200	ND	91	78-122%	---	---	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080549 - EPA 5030B						Water						
Matrix Spike (9080549-MS1)			Prepared: 08/01/19 15:08 Analyzed: 08/01/19 18:16									
QC Source Sample: DP-1W (A9G0664-04)												
1,2,4-Trimethylbenzene	0.186	0.0500	0.100	ug/L	1	0.200	ND	93	76-124%	---	---	
1,3,5-Trimethylbenzene	0.182	0.0500	0.100	ug/L	1	0.200	ND	91	75-124%	---	---	
Chloroform	0.211	0.0500	0.100	ug/L	1	0.200	ND	105	79-124%	---	---	
1,2-Dibromo-3-chloropropane	0.191	0.100	0.200	ug/L	1	0.200	ND	96	62-128%	---	---	J
1,2-Dibromoethane (EDB)	0.192	0.0100	0.0200	ug/L	1	0.200	ND	96	77-121%	---	---	
1,1-Dichloroethane	0.218	0.0100	0.0200	ug/L	1	0.200	ND	109	77-125%	---	---	
1,2-Dichloroethane (EDC)	0.214	0.0100	0.0200	ug/L	1	0.200	ND	107	73-128%	---	---	
1,1-Dichloroethene	0.200	0.0100	0.0200	ug/L	1	0.200	ND	100	71-131%	---	---	
cis-1,2-Dichloroethene	0.212	0.0100	0.0200	ug/L	1	0.200	ND	106	78-123%	---	---	
trans-1,2-Dichloroethene	0.203	0.0100	0.0200	ug/L	1	0.200	ND	101	75-124%	---	---	
1,2-Dichloropropane	0.213	0.0100	0.0200	ug/L	1	0.200	ND	107	78-122%	---	---	
cis-1,3-Dichloropropene	0.201	0.0100	0.0200	ug/L	1	0.200	ND	100	75-124%	---	---	
trans-1,3-Dichloropropene	0.203	0.0100	0.0200	ug/L	1	0.200	ND	101	73-127%	---	---	
Methyl tert-butyl ether (MTBE)	0.203	0.0100	0.0200	ug/L	1	0.200	ND	102	71-124%	---	---	
Naphthalene	0.186	0.0500	0.100	ug/L	1	0.200	ND	93	61-128%	---	---	
1,1,2,2-Tetrachloroethane	0.198	0.0100	0.0200	ug/L	1	0.200	ND	99	71-121%	---	---	
1,1,2-Trichloroethane	0.198	0.0100	0.0200	ug/L	1	0.200	ND	99	80-120%	---	---	
Trichloroethene (TCE)	0.216	0.0100	0.0200	ug/L	1	0.200	ND	108	79-123%	---	---	
1,2,3-Trichloropropane	0.201	0.0500	0.100	ug/L	1	0.200	ND	101	73-122%	---	---	
Vinyl chloride	0.220	0.0100	0.0200	ug/L	1	0.200	ND	110	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 104 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

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 9071362 - EPA 3510C (Neutral pH)						Water						
Blank (9071362-BLK1)			Prepared: 07/29/19 13:08		Analyzed: 07/30/19 08:21		C-07					
EPA 8082A												
Aroclor 1016	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 82 %		Limits: 40-135 %		Dilution: 1x						
LCS (9071362-BS1)			Prepared: 07/29/19 13:08		Analyzed: 07/30/19 08:39		C-07					
EPA 8082A												
Aroclor 1016	1.61	0.0200	0.0400	ug/L	1	2.50	---	64	46-129%	---	---	
Aroclor 1260	1.93	0.0200	0.0400	ug/L	1	2.50	---	77	45-134%	---	---	
Surr: Decachlorobiphenyl (Surr)		Recovery: 80 %		Limits: 40-135 %		Dilution: 1x						
LCS Dup (9071362-BSD1)			Prepared: 07/29/19 13:08		Analyzed: 07/30/19 08:56		C-07, Q-19					
EPA 8082A												
Aroclor 1016	1.63	0.0200	0.0400	ug/L	1	2.50	---	65	46-129%	1	30%	
Aroclor 1260	1.96	0.0200	0.0400	ug/L	1	2.50	---	78	45-134%	2	30%	
Surr: Decachlorobiphenyl (Surr)		Recovery: 81 %		Limits: 40-135 %		Dilution: 1x						

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071208-BLK1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 13:31							
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071208-BLK1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 13:31							
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071208-BLK1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 13:31							
Benzoic acid	ND	1.14	2.27	ug/L	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.455	0.909	ug/L	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
Pyridine	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 71 %		Limits: 44-120 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		76 %		44-120 %		"						
Phenol-d6 (Surr)		22 %		10-120 %		"						
p-Terphenyl-d14 (Surr)		85 %		50-133 %		"						
2-Fluorophenol (Surr)		37 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		60 %		43-140 %		"						
												Q-41
LCS (9071208-BS1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 14:08							
EPA 8270D												
Acenaphthene	3.21	0.0200	0.0400	ug/L	2	4.00	---	80	47-122%	---	---	
Acenaphthylene	3.26	0.0200	0.0400	ug/L	2	4.00	---	81	41-130%	---	---	
Anthracene	3.41	0.0200	0.0400	ug/L	2	4.00	---	85	57-123%	---	---	
Benz(a)anthracene	3.64	0.0200	0.0400	ug/L	2	4.00	---	91	58-125%	---	---	
Benzo(a)pyrene	4.21	0.0300	0.0600	ug/L	2	4.00	---	105	54-128%	---	---	
Benzo(b)fluoranthene	4.19	0.0300	0.0600	ug/L	2	4.00	---	105	53-131%	---	---	
Benzo(k)fluoranthene	4.22	0.0300	0.0600	ug/L	2	4.00	---	105	57-129%	---	---	
Benzo(g,h,i)perylene	3.93	0.0200	0.0400	ug/L	2	4.00	---	98	50-134%	---	---	
Chrysene	3.74	0.0200	0.0400	ug/L	2	4.00	---	94	59-123%	---	---	
Dibenz(a,h)anthracene	4.00	0.0200	0.0400	ug/L	2	4.00	---	100	51-134%	---	---	
Fluoranthene	3.85	0.0200	0.0400	ug/L	2	4.00	---	96	57-128%	---	---	
Fluorene	3.50	0.0200	0.0400	ug/L	2	4.00	---	87	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.80	0.0200	0.0400	ug/L	2	4.00	---	95	52-133%	---	---	
1-Methylnaphthalene	3.04	0.0400	0.0800	ug/L	2	4.00	---	76	41-120%	---	---	
2-Methylnaphthalene	3.10	0.0400	0.0800	ug/L	2	4.00	---	78	40-121%	---	---	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071208-BS1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 14:08							
Naphthalene	2.86	0.0400	0.0800	ug/L	2	4.00	---	71	40-121%	---	---	
Phenanthrene	3.38	0.0200	0.0400	ug/L	2	4.00	---	85	59-120%	---	---	
Pyrene	3.90	0.0200	0.0400	ug/L	2	4.00	---	98	57-126%	---	---	
Carbazole	3.64	0.0300	0.0600	ug/L	2	4.00	---	91	60-122%	---	---	
Dibenzofuran	3.30	0.0200	0.0400	ug/L	2	4.00	---	83	53-120%	---	---	
4-Chloro-3-methylphenol	3.18	0.200	0.400	ug/L	2	4.00	---	80	52-120%	---	---	
2-Chlorophenol	2.90	0.100	0.200	ug/L	2	4.00	---	72	38-120%	---	---	
2,4-Dichlorophenol	3.40	0.100	0.200	ug/L	2	4.00	---	85	47-121%	---	---	
2,4-Dimethylphenol	2.33	0.100	0.200	ug/L	2	4.00	---	58	31-124%	---	---	
2,4-Dinitrophenol	4.94	0.500	1.00	ug/L	2	4.00	---	124	23-143%	---	---	
4,6-Dinitro-2-methylphenol	5.67	0.500	1.00	ug/L	2	4.00	---	142	44-137%	---	---	Q-29, Q-41
2-Methylphenol	2.45	0.0500	0.100	ug/L	2	4.00	---	61	30-120%	---	---	
3+4-Methylphenol(s)	2.24	0.0500	0.100	ug/L	2	4.00	---	56	29-120%	---	---	
2-Nitrophenol	3.51	0.200	0.400	ug/L	2	4.00	---	88	47-123%	---	---	Q-41
4-Nitrophenol	1.25	0.200	0.400	ug/L	2	4.00	---	31	5-120%	---	---	Q-31
Pentachlorophenol (PCP)	3.66	0.200	0.400	ug/L	2	4.00	---	91	35-138%	---	---	
Phenol	1.27	0.400	0.800	ug/L	2	4.00	---	32	5-120%	---	---	
2,3,4,6-Tetrachlorophenol	3.63	0.100	0.200	ug/L	2	4.00	---	91	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	3.83	0.100	0.200	ug/L	2	4.00	---	96	50-121%	---	---	
2,4,5-Trichlorophenol	3.49	0.100	0.200	ug/L	2	4.00	---	87	53-123%	---	---	
2,4,6-Trichlorophenol	3.44	0.100	0.200	ug/L	2	4.00	---	86	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	3.68	0.400	0.800	ug/L	2	4.00	---	92	55-135%	---	---	
Butyl benzyl phthalate	3.61	0.400	0.800	ug/L	2	4.00	---	90	53-134%	---	---	
Diethylphthalate	3.99	0.400	0.800	ug/L	2	4.00	---	100	55-125%	---	---	
Dimethylphthalate	3.75	0.400	0.800	ug/L	2	4.00	---	94	45-127%	---	---	
Di-n-butylphthalate	3.66	0.400	0.800	ug/L	2	4.00	---	91	59-127%	---	---	
Di-n-octyl phthalate	4.00	0.400	0.800	ug/L	2	4.00	---	100	51-140%	---	---	
N-Nitrosodimethylamine	1.62	0.0500	0.100	ug/L	2	4.00	---	40	6-120%	---	---	
N-Nitroso-di-n-propylamine	3.03	0.0500	0.100	ug/L	2	4.00	---	76	49-120%	---	---	
N-Nitrosodiphenylamine	3.32	0.0500	0.100	ug/L	2	4.00	---	83	51-123%	---	---	
Bis(2-Chloroethoxy) methane	2.96	0.0500	0.100	ug/L	2	4.00	---	74	48-120%	---	---	
Bis(2-Chloroethyl) ether	2.86	0.0500	0.100	ug/L	2	4.00	---	71	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	2.59	0.0500	0.100	ug/L	2	4.00	---	65	37-130%	---	---	
Hexachlorobenzene	3.40	0.0200	0.0400	ug/L	2	4.00	---	85	52-125%	---	---	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071208-BS1)			Prepared: 07/24/19 07:02		Analyzed: 07/24/19 14:08							
Hexachlorobutadiene	2.90	0.0500	0.100	ug/L	2	4.00	---	73	22-124%	---	---	Q-31
Hexachlorocyclopentadiene	2.90	0.100	0.200	ug/L	2	4.00	---	72	5-127%	---	---	
Hexachloroethane	2.49	0.0500	0.100	ug/L	2	4.00	---	62	21-120%	---	---	
2-Chloronaphthalene	2.94	0.0200	0.0400	ug/L	2	4.00	---	74	40-120%	---	---	
1,2-Dichlorobenzene	2.70	0.0500	0.100	ug/L	2	4.00	---	68	32-120%	---	---	
1,3-Dichlorobenzene	2.62	0.0500	0.100	ug/L	2	4.00	---	65	28-120%	---	---	
1,4-Dichlorobenzene	2.66	0.0500	0.100	ug/L	2	4.00	---	66	29-120%	---	---	
1,2,4-Trichlorobenzene	2.91	0.0500	0.100	ug/L	2	4.00	---	73	29-120%	---	---	
4-Bromophenyl phenyl ether	3.41	0.0500	0.100	ug/L	2	4.00	---	85	54-124%	---	---	
4-Chlorophenyl phenyl ether	3.59	0.0500	0.100	ug/L	2	4.00	---	90	53-121%	---	---	
Aniline	2.45	0.100	0.200	ug/L	2	4.00	---	61	6-120%	---	---	Q-41
4-Chloroaniline	2.80	0.0500	0.100	ug/L	2	4.00	---	70	33-120%	---	---	
2-Nitroaniline	3.62	0.400	0.800	ug/L	2	4.00	---	91	54-127%	---	---	
3-Nitroaniline	3.59	0.400	0.800	ug/L	2	4.00	---	90	41-128%	---	---	
4-Nitroaniline	4.22	0.400	0.800	ug/L	2	4.00	---	105	35-120%	---	---	
Nitrobenzene	2.99	0.200	0.400	ug/L	2	4.00	---	75	45-121%	---	---	
2,4-Dinitrotoluene	4.02	0.200	0.400	ug/L	2	4.00	---	101	57-128%	---	---	
2,6-Dinitrotoluene	3.83	0.200	0.400	ug/L	2	4.00	---	96	57-124%	---	---	
Benzoic acid	0.887	0.800	0.800	ug/L	2	8.00	---	11	5-120%	---	---	
Benzyl alcohol	2.53	0.200	0.400	ug/L	2	4.00	---	63	31-120%	---	---	
Isophorone	3.08	0.0500	0.100	ug/L	2	4.00	---	77	42-124%	---	---	
Azobenzene (1,2-DPH)	2.81	0.0500	0.100	ug/L	2	4.00	---	70	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	3.59	0.500	1.00	ug/L	2	4.00	---	90	40-125%	---	---	
3,3'-Dichlorobenzidine	7.82	1.00	2.00	ug/L	2	8.00	---	98	27-129%	---	---	
1,2-Dinitrobenzene	3.91	0.500	1.00	ug/L	2	4.00	---	98	59-120%	---	---	
1,3-Dinitrobenzene	4.01	0.500	1.00	ug/L	2	4.00	---	100	49-128%	---	---	
1,4-Dinitrobenzene	4.26	0.500	1.00	ug/L	2	4.00	---	106	40-120%	---	---	
Pyridine	1.45	0.200	0.400	ug/L	2	4.00	---	36	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 75 %		Limits: 44-120 %		Dilution: 2x						
2-Fluorobiphenyl (Surr)		74 %		44-120 %		"						
Phenol-d6 (Surr)		24 %		10-120 %		"						
p-Terphenyl-d14 (Surr)		86 %		50-133 %		"						
2-Fluorophenol (Surr)		38 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		89 %		43-140 %		"						

Q-41

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Philip Nerenberg

Philip Nerenberg, Lab Director

**Apex Laboratories, LLC**

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

AMENDED REPORT**GeoDesign, Inc.**

9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****QUALITY CONTROL (QC) SAMPLE RESULTS****Semivolatile Organic Compounds by EPA 8270D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (9071208-BSD1)				Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:44								Q-19
EPA 8270D												
Acenaphthene	3.43	0.0200	0.0400	ug/L	2	4.00	---	86	47-122%	7	30%	
Acenaphthylene	3.50	0.0200	0.0400	ug/L	2	4.00	---	87	41-130%	7	30%	
Anthracene	3.52	0.0200	0.0400	ug/L	2	4.00	---	88	57-123%	3	30%	
Benz(a)anthracene	3.71	0.0200	0.0400	ug/L	2	4.00	---	93	58-125%	2	30%	
Benzo(a)pyrene	4.33	0.0300	0.0600	ug/L	2	4.00	---	108	54-128%	3	30%	
Benzo(b)fluoranthene	4.24	0.0300	0.0600	ug/L	2	4.00	---	106	53-131%	1	30%	
Benzo(k)fluoranthene	4.29	0.0300	0.0600	ug/L	2	4.00	---	107	57-129%	2	30%	
Benzo(g,h,i)perylene	4.00	0.0200	0.0400	ug/L	2	4.00	---	100	50-134%	2	30%	
Chrysene	3.80	0.0200	0.0400	ug/L	2	4.00	---	95	59-123%	2	30%	
Dibenz(a,h)anthracene	4.14	0.0200	0.0400	ug/L	2	4.00	---	104	51-134%	4	30%	
Fluoranthene	3.82	0.0200	0.0400	ug/L	2	4.00	---	96	57-128%	0.6	30%	
Fluorene	3.66	0.0200	0.0400	ug/L	2	4.00	---	91	52-124%	5	30%	
Indeno(1,2,3-cd)pyrene	3.82	0.0200	0.0400	ug/L	2	4.00	---	96	52-133%	0.6	30%	
1-Methylnaphthalene	3.35	0.0400	0.0800	ug/L	2	4.00	---	84	41-120%	10	30%	
2-Methylnaphthalene	3.40	0.0400	0.0800	ug/L	2	4.00	---	85	40-121%	9	30%	
Naphthalene	3.08	0.0400	0.0800	ug/L	2	4.00	---	77	40-121%	8	30%	
Phenanthrene	3.57	0.0200	0.0400	ug/L	2	4.00	---	89	59-120%	5	30%	
Pyrene	3.88	0.0200	0.0400	ug/L	2	4.00	---	97	57-126%	0.5	30%	
Carbazole	3.60	0.0300	0.0600	ug/L	2	4.00	---	90	60-122%	1	30%	
Dibenzofuran	3.53	0.0200	0.0400	ug/L	2	4.00	---	88	53-120%	7	30%	
4-Chloro-3-methylphenol	3.61	0.200	0.400	ug/L	2	4.00	---	90	52-120%	13	30%	
2-Chlorophenol	3.09	0.100	0.200	ug/L	2	4.00	---	77	38-120%	6	30%	
2,4-Dichlorophenol	3.76	0.100	0.200	ug/L	2	4.00	---	94	47-121%	10	30%	
2,4-Dimethylphenol	2.64	0.100	0.200	ug/L	2	4.00	---	66	31-124%	13	30%	
2,4-Dinitrophenol	4.83	0.500	1.00	ug/L	2	4.00	---	121	23-143%	2	30%	
4,6-Dinitro-2-methylphenol	5.39	0.500	1.00	ug/L	2	4.00	---	135	44-137%	5	30%	Q-41
2-Methylphenol	2.63	0.0500	0.100	ug/L	2	4.00	---	66	30-120%	7	30%	
3+4-Methylphenol(s)	2.39	0.0500	0.100	ug/L	2	4.00	---	60	29-120%	6	30%	
2-Nitrophenol	3.87	0.200	0.400	ug/L	2	4.00	---	97	47-123%	10	30%	Q-41
4-Nitrophenol	1.19	0.200	0.400	ug/L	2	4.00	---	30	5-120%	5	30%	Q-31
Pentachlorophenol (PCP)	3.78	0.200	0.400	ug/L	2	4.00	---	94	35-138%	3	30%	
Phenol	1.36	0.400	0.800	ug/L	2	4.00	---	34	5-120%	7	30%	
2,3,4,6-Tetrachlorophenol	3.80	0.100	0.200	ug/L	2	4.00	---	95	50-128%	5	30%	

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (9071208-BSD1)						Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:44						Q-19
2,3,5,6-Tetrachlorophenol	4.05	0.100	0.200	ug/L	2	4.00	---	101	50-121%	6	30%	
2,4,5-Trichlorophenol	3.75	0.100	0.200	ug/L	2	4.00	---	94	53-123%	7	30%	
2,4,6-Trichlorophenol	3.98	0.100	0.200	ug/L	2	4.00	---	99	50-125%	15	30%	
Bis(2-ethylhexyl)phthalate	3.66	0.400	0.800	ug/L	2	4.00	---	92	55-135%	0.3	30%	
Butyl benzyl phthalate	3.59	0.400	0.800	ug/L	2	4.00	---	90	53-134%	0.4	30%	
Diethylphthalate	3.96	0.400	0.800	ug/L	2	4.00	---	99	55-125%	0.6	30%	
Dimethylphthalate	3.90	0.400	0.800	ug/L	2	4.00	---	97	45-127%	4	30%	
Di-n-butylphthalate	3.56	0.400	0.800	ug/L	2	4.00	---	89	59-127%	3	30%	
Di-n-octyl phthalate	4.01	0.400	0.800	ug/L	2	4.00	---	100	51-140%	0.2	30%	
N-Nitrosodimethylamine	1.75	0.0500	0.100	ug/L	2	4.00	---	44	6-120%	8	30%	
N-Nitroso-di-n-propylamine	3.18	0.0500	0.100	ug/L	2	4.00	---	80	49-120%	5	30%	
N-Nitrosodiphenylamine	3.65	0.0500	0.100	ug/L	2	4.00	---	91	51-123%	9	30%	
Bis(2-Chloroethoxy) methane	3.19	0.0500	0.100	ug/L	2	4.00	---	80	48-120%	7	30%	
Bis(2-Chloroethyl) ether	3.01	0.0500	0.100	ug/L	2	4.00	---	75	43-120%	5	30%	
2,2'-Oxybis(1-Chloropropane)	2.70	0.0500	0.100	ug/L	2	4.00	---	68	37-130%	5	30%	
Hexachlorobenzene	3.79	0.0200	0.0400	ug/L	2	4.00	---	95	52-125%	11	30%	
Hexachlorobutadiene	3.12	0.0500	0.100	ug/L	2	4.00	---	78	22-124%	7	30%	
Hexachlorocyclopentadiene	3.28	0.100	0.200	ug/L	2	4.00	---	82	5-127%	12	30%	
Hexachloroethane	2.72	0.0500	0.100	ug/L	2	4.00	---	68	21-120%	9	30%	
2-Chloronaphthalene	3.19	0.0200	0.0400	ug/L	2	4.00	---	80	40-120%	8	30%	
1,2-Dichlorobenzene	2.87	0.0500	0.100	ug/L	2	4.00	---	72	32-120%	6	30%	
1,3-Dichlorobenzene	2.78	0.0500	0.100	ug/L	2	4.00	---	69	28-120%	6	30%	
1,4-Dichlorobenzene	2.82	0.0500	0.100	ug/L	2	4.00	---	71	29-120%	6	30%	
1,2,4-Trichlorobenzene	3.18	0.0500	0.100	ug/L	2	4.00	---	79	29-120%	9	30%	
4-Bromophenyl phenyl ether	3.72	0.0500	0.100	ug/L	2	4.00	---	93	54-124%	9	30%	
4-Chlorophenyl phenyl ether	3.71	0.0500	0.100	ug/L	2	4.00	---	93	53-121%	3	30%	
Aniline	2.59	0.100	0.200	ug/L	2	4.00	---	65	6-120%	6	30%	Q-31
4-Chloroaniline	3.05	0.0500	0.100	ug/L	2	4.00	---	76	33-120%	9	30%	
2-Nitroaniline	3.92	0.400	0.800	ug/L	2	4.00	---	98	54-127%	8	30%	
3-Nitroaniline	3.61	0.400	0.800	ug/L	2	4.00	---	90	41-128%	0.5	30%	
4-Nitroaniline	3.87	0.400	0.800	ug/L	2	4.00	---	97	35-120%	9	30%	
Nitrobenzene	3.15	0.200	0.400	ug/L	2	4.00	---	79	45-121%	5	30%	
2,4-Dinitrotoluene	4.03	0.200	0.400	ug/L	2	4.00	---	101	57-128%	0.3	30%	
2,6-Dinitrotoluene	4.03	0.200	0.400	ug/L	2	4.00	---	101	57-124%	5	30%	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: BCSAmerica-1-01-02

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071208 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (9071208-BSD1)					Prepared: 07/24/19 07:02 Analyzed: 07/24/19 14:44						Q-19	
Benzoic acid	1.41	1.40	1.40	ug/L	2	8.00	---	18	5-120%	45	30%	Q-24
Benzyl alcohol	2.72	0.200	0.400	ug/L	2	4.00	---	68	31-120%	7	30%	
Isophorone	3.36	0.0500	0.100	ug/L	2	4.00	---	84	42-124%	9	30%	
Azobenzene (1,2-DPH)	3.11	0.0500	0.100	ug/L	2	4.00	---	78	61-120%	10	30%	
Bis(2-Ethylhexyl) adipate	3.38	0.500	1.00	ug/L	2	4.00	---	84	40-125%	6	30%	
3,3'-Dichlorobenzidine	8.24	1.00	2.00	ug/L	2	8.00	---	103	27-129%	5	30%	
1,2-Dinitrobenzene	4.01	0.500	1.00	ug/L	2	4.00	---	100	59-120%	3	30%	
1,3-Dinitrobenzene	4.09	0.500	1.00	ug/L	2	4.00	---	102	49-128%	2	30%	
1,4-Dinitrobenzene	4.55	0.500	1.00	ug/L	2	4.00	---	114	40-120%	7	30%	Q-41
Pyridine	1.55	0.200	0.400	ug/L	2	4.00	---	39	5-120%	6	30%	
Surr: Nitrobenzene-d5 (Surr) Recovery: 83 % Limits: 44-120 % Dilution: 2x												
2-Fluorobiphenyl (Surr) 81 % 44-120 % "												
Phenol-d6 (Surr) 27 % 10-120 % "												
p-Terphenyl-d14 (Surr) 89 % 50-133 % "												
2-Fluorophenol (Surr) 43 % 19-120 % "												
2,4,6-Tribromophenol (Surr) 103 % 43-140 % " Q-41												

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071294-BLK2)			Prepared: 07/25/19 13:03		Analyzed: 07/26/19 10:59							
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071294-BLK2)			Prepared: 07/25/19 13:03		Analyzed: 07/26/19 10:59							
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Aniline	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
Blank (9071294-BLK2)			Prepared: 07/25/19 13:03		Analyzed: 07/26/19 10:59							
Benzoic acid	ND	1.14	2.27	ug/L	1	---	---	---	---	---	---	Q-52
Benzyl alcohol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Isophorone	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.455	0.909	ug/L	1	---	---	---	---	---	---	
1,2-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
Pyridine	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 71 %		Limits: 44-120 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		66 %		44-120 %		"						
Phenol-d6 (Surr)		26 %		10-120 %		"						
p-Terphenyl-d14 (Surr)		88 %		50-133 %		"						
2-Fluorophenol (Surr)		39 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		83 %		43-140 %		"						
LCS (9071294-BS1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:07						
EPA 8270D												
Acenaphthene	3.27	0.0400	0.0800	ug/L	4	4.00	---	82	47-122%	---	---	
Acenaphthylene	3.42	0.0400	0.0800	ug/L	4	4.00	---	86	41-130%	---	---	
Anthracene	3.56	0.0400	0.0800	ug/L	4	4.00	---	89	57-123%	---	---	
Benz(a)anthracene	3.73	0.0400	0.0800	ug/L	4	4.00	---	93	58-125%	---	---	
Benzo(a)pyrene	3.70	0.0600	0.120	ug/L	4	4.00	---	92	54-128%	---	---	
Benzo(b)fluoranthene	3.83	0.0600	0.120	ug/L	4	4.00	---	96	53-131%	---	---	
Benzo(k)fluoranthene	3.93	0.0600	0.120	ug/L	4	4.00	---	98	57-129%	---	---	
Benzo(g,h,i)perylene	3.93	0.0400	0.0800	ug/L	4	4.00	---	98	50-134%	---	---	
Chrysene	3.80	0.0400	0.0800	ug/L	4	4.00	---	95	59-123%	---	---	
Dibenz(a,h)anthracene	3.74	0.0400	0.0800	ug/L	4	4.00	---	94	51-134%	---	---	
Fluoranthene	3.86	0.0400	0.0800	ug/L	4	4.00	---	97	57-128%	---	---	
Fluorene	3.51	0.0400	0.0800	ug/L	4	4.00	---	88	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.56	0.0400	0.0800	ug/L	4	4.00	---	89	52-133%	---	---	
1-Methylnaphthalene	3.00	0.0800	0.160	ug/L	4	4.00	---	75	41-120%	---	---	
2-Methylnaphthalene	3.06	0.0800	0.160	ug/L	4	4.00	---	76	40-121%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071294-BS1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:07						
Naphthalene	2.94	0.0800	0.160	ug/L	4	4.00	---	74	40-121%	---	---	
Phenanthrene	3.49	0.0400	0.0800	ug/L	4	4.00	---	87	59-120%	---	---	
Pyrene	3.91	0.0400	0.0800	ug/L	4	4.00	---	98	57-126%	---	---	
Carbazole	4.05	0.0600	0.120	ug/L	4	4.00	---	101	60-122%	---	---	
Dibenzofuran	3.43	0.0400	0.0800	ug/L	4	4.00	---	86	53-120%	---	---	
4-Chloro-3-methylphenol	3.22	0.400	0.800	ug/L	4	4.00	---	80	52-120%	---	---	
2-Chlorophenol	2.74	0.200	0.400	ug/L	4	4.00	---	68	38-120%	---	---	
2,4-Dichlorophenol	3.49	0.200	0.400	ug/L	4	4.00	---	87	47-121%	---	---	
2,4-Dimethylphenol	2.20	0.200	0.400	ug/L	4	4.00	---	55	31-124%	---	---	
2,4-Dinitrophenol	3.33	1.00	2.00	ug/L	4	4.00	---	83	23-143%	---	---	
4,6-Dinitro-2-methylphenol	3.98	1.00	2.00	ug/L	4	4.00	---	99	44-137%	---	---	
2-Methylphenol	2.39	0.100	0.200	ug/L	4	4.00	---	60	30-120%	---	---	
3+4-Methylphenol(s)	2.38	0.100	0.200	ug/L	4	4.00	---	59	29-120%	---	---	
2-Nitrophenol	3.45	0.400	0.800	ug/L	4	4.00	---	86	47-123%	---	---	
4-Nitrophenol	1.51	0.400	0.800	ug/L	4	4.00	---	38	5-120%	---	---	
Pentachlorophenol (PCP)	3.76	0.400	0.800	ug/L	4	4.00	---	94	35-138%	---	---	
Phenol	1.07	0.800	0.800	ug/L	4	4.00	---	27	5-120%	---	---	
2,3,4,6-Tetrachlorophenol	3.47	0.200	0.400	ug/L	4	4.00	---	87	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	3.41	0.200	0.400	ug/L	4	4.00	---	85	50-121%	---	---	
2,4,5-Trichlorophenol	3.63	0.200	0.400	ug/L	4	4.00	---	91	53-123%	---	---	
2,4,6-Trichlorophenol	3.42	0.200	0.400	ug/L	4	4.00	---	86	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	3.87	0.800	1.60	ug/L	4	4.00	---	97	55-135%	---	---	
Butyl benzyl phthalate	3.69	0.800	1.60	ug/L	4	4.00	---	92	53-134%	---	---	
Diethylphthalate	3.81	0.800	1.60	ug/L	4	4.00	---	95	55-125%	---	---	
Dimethylphthalate	3.60	0.800	1.60	ug/L	4	4.00	---	90	45-127%	---	---	
Di-n-butylphthalate	3.94	0.800	1.60	ug/L	4	4.00	---	99	59-127%	---	---	
Di-n-octyl phthalate	3.74	0.800	1.60	ug/L	4	4.00	---	94	51-140%	---	---	
N-Nitrosodimethylamine	1.82	0.100	0.200	ug/L	4	4.00	---	46	6-120%	---	---	
N-Nitroso-di-n-propylamine	2.99	0.100	0.200	ug/L	4	4.00	---	75	49-120%	---	---	
N-Nitrosodiphenylamine	3.64	0.100	0.200	ug/L	4	4.00	---	91	51-123%	---	---	
Bis(2-Chloroethoxy) methane	3.41	0.100	0.200	ug/L	4	4.00	---	85	48-120%	---	---	
Bis(2-Chloroethyl) ether	2.49	0.100	0.200	ug/L	4	4.00	---	62	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	2.58	0.100	0.200	ug/L	4	4.00	---	65	37-130%	---	---	
Hexachlorobenzene	3.41	0.0400	0.0800	ug/L	4	4.00	---	85	52-125%	---	---	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS (9071294-BS1)			Prepared: 07/25/19 13:03		Analyzed: 07/25/19 19:07							
Hexachlorobutadiene	2.75	0.100	0.200	ug/L	4	4.00	---	69	22-124%	---	---	Q-31
Hexachlorocyclopentadiene	3.05	0.200	0.400	ug/L	4	4.00	---	76	5-127%	---	---	
Hexachloroethane	2.83	0.100	0.200	ug/L	4	4.00	---	71	21-120%	---	---	
2-Chloronaphthalene	3.25	0.0400	0.0800	ug/L	4	4.00	---	81	40-120%	---	---	
1,2-Dichlorobenzene	2.55	0.100	0.200	ug/L	4	4.00	---	64	32-120%	---	---	
1,3-Dichlorobenzene	2.50	0.100	0.200	ug/L	4	4.00	---	62	28-120%	---	---	
1,4-Dichlorobenzene	2.56	0.100	0.200	ug/L	4	4.00	---	64	29-120%	---	---	
1,2,4-Trichlorobenzene	2.90	0.100	0.200	ug/L	4	4.00	---	73	29-120%	---	---	
4-Bromophenyl phenyl ether	3.53	0.100	0.200	ug/L	4	4.00	---	88	54-124%	---	---	
4-Chlorophenyl phenyl ether	3.48	0.100	0.200	ug/L	4	4.00	---	87	53-121%	---	---	
Aniline	2.51	0.200	0.400	ug/L	4	4.00	---	63	6-120%	---	---	
4-Chloroaniline	2.46	0.100	0.200	ug/L	4	4.00	---	61	33-120%	---	---	
2-Nitroaniline	3.61	0.800	1.60	ug/L	4	4.00	---	90	54-127%	---	---	
3-Nitroaniline	3.10	0.800	1.60	ug/L	4	4.00	---	77	41-128%	---	---	
4-Nitroaniline	3.94	0.800	1.60	ug/L	4	4.00	---	99	35-120%	---	---	
Nitrobenzene	2.81	0.400	0.800	ug/L	4	4.00	---	70	45-121%	---	---	
2,4-Dinitrotoluene	3.71	0.400	0.800	ug/L	4	4.00	---	93	57-128%	---	---	
2,6-Dinitrotoluene	3.74	0.400	0.800	ug/L	4	4.00	---	94	57-124%	---	---	
Benzoic acid	1.39	1.20	1.20	ug/L	4	8.00	---	17	5-120%	---	---	
Benzyl alcohol	2.64	0.400	0.800	ug/L	4	4.00	---	66	31-120%	---	---	
Isophorone	3.28	0.100	0.200	ug/L	4	4.00	---	82	42-124%	---	---	
Azobenzene (1,2-DPH)	3.52	0.100	0.200	ug/L	4	4.00	---	88	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	3.70	1.00	2.00	ug/L	4	4.00	---	93	40-125%	---	---	
3,3'-Dichlorobenzidine	10.3	2.00	4.00	ug/L	4	8.00	---	129	27-129%	---	---	
1,2-Dinitrobenzene	3.51	1.00	2.00	ug/L	4	4.00	---	88	59-120%	---	---	
1,3-Dinitrobenzene	3.62	1.00	2.00	ug/L	4	4.00	---	91	49-128%	---	---	
1,4-Dinitrobenzene	3.52	1.00	2.00	ug/L	4	4.00	---	88	40-120%	---	---	
Pyridine	1.50	0.400	0.800	ug/L	4	4.00	---	38	5-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 68 %		Limits: 44-120 %		Dilution: 4x						
2-Fluorobiphenyl (Surr)		80 %		44-120 %		"						
Phenol-d6 (Surr)		27 %		10-120 %		"						
p-Terphenyl-d14 (Surr)		94 %		50-133 %		"						
2-Fluorophenol (Surr)		39 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		96 %		43-140 %		"						

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)							Water					
LCS Dup (9071294-BSD1)				Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:44					Q-19			
EPA 8270D												
Acenaphthene	3.49	0.0400	0.0800	ug/L	4	4.00	---	87	47-122%	7	30%	
Acenaphthylene	3.59	0.0400	0.0800	ug/L	4	4.00	---	90	41-130%	5	30%	
Anthracene	3.74	0.0400	0.0800	ug/L	4	4.00	---	94	57-123%	5	30%	
Benz(a)anthracene	3.85	0.0400	0.0800	ug/L	4	4.00	---	96	58-125%	3	30%	
Benzo(a)pyrene	3.96	0.0600	0.120	ug/L	4	4.00	---	99	54-128%	7	30%	
Benzo(b)fluoranthene	4.03	0.0600	0.120	ug/L	4	4.00	---	101	53-131%	5	30%	
Benzo(k)fluoranthene	4.13	0.0600	0.120	ug/L	4	4.00	---	103	57-129%	5	30%	
Benzo(g,h,i)perylene	4.08	0.0400	0.0800	ug/L	4	4.00	---	102	50-134%	4	30%	
Chrysene	3.91	0.0400	0.0800	ug/L	4	4.00	---	98	59-123%	3	30%	
Dibenz(a,h)anthracene	3.89	0.0400	0.0800	ug/L	4	4.00	---	97	51-134%	4	30%	
Fluoranthene	3.96	0.0400	0.0800	ug/L	4	4.00	---	99	57-128%	3	30%	
Fluorene	3.66	0.0400	0.0800	ug/L	4	4.00	---	91	52-124%	4	30%	
Indeno(1,2,3-cd)pyrene	3.67	0.0400	0.0800	ug/L	4	4.00	---	92	52-133%	3	30%	
1-Methylnaphthalene	3.18	0.0800	0.160	ug/L	4	4.00	---	80	41-120%	6	30%	
2-Methylnaphthalene	3.31	0.0800	0.160	ug/L	4	4.00	---	83	40-121%	8	30%	
Naphthalene	3.22	0.0800	0.160	ug/L	4	4.00	---	80	40-121%	9	30%	
Phenanthrene	3.70	0.0400	0.0800	ug/L	4	4.00	---	92	59-120%	6	30%	
Pyrene	4.04	0.0400	0.0800	ug/L	4	4.00	---	101	57-126%	3	30%	
Carbazole	4.14	0.0600	0.120	ug/L	4	4.00	---	104	60-122%	2	30%	
Dibenzofuran	3.57	0.0400	0.0800	ug/L	4	4.00	---	89	53-120%	4	30%	
4-Chloro-3-methylphenol	3.42	0.400	0.800	ug/L	4	4.00	---	86	52-120%	6	30%	
2-Chlorophenol	2.94	0.200	0.400	ug/L	4	4.00	---	73	38-120%	7	30%	
2,4-Dichlorophenol	3.77	0.200	0.400	ug/L	4	4.00	---	94	47-121%	8	30%	
2,4-Dimethylphenol	2.53	0.200	0.400	ug/L	4	4.00	---	63	31-124%	14	30%	
2,4-Dinitrophenol	3.27	1.00	2.00	ug/L	4	4.00	---	82	23-143%	2	30%	
4,6-Dinitro-2-methylphenol	3.90	1.00	2.00	ug/L	4	4.00	---	97	44-137%	2	30%	
2-Methylphenol	2.63	0.100	0.200	ug/L	4	4.00	---	66	30-120%	9	30%	
3+4-Methylphenol(s)	2.64	0.100	0.200	ug/L	4	4.00	---	66	29-120%	10	30%	
2-Nitrophenol	3.63	0.400	0.800	ug/L	4	4.00	---	91	47-123%	5	30%	
4-Nitrophenol	1.60	0.400	0.800	ug/L	4	4.00	---	40	5-120%	6	30%	
Pentachlorophenol (PCP)	3.82	0.400	0.800	ug/L	4	4.00	---	95	35-138%	1	30%	
Phenol	1.44	0.800	0.800	ug/L	4	4.00	---	36	5-120%	30	30%	
2,3,4,6-Tetrachlorophenol	3.74	0.200	0.400	ug/L	4	4.00	---	93	50-128%	7	30%	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (9071294-BSD1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:44						Q-19
2,3,5,6-Tetrachlorophenol	3.63	0.200	0.400	ug/L	4	4.00	---	91	50-121%	6	30%	
2,4,5-Trichlorophenol	3.93	0.200	0.400	ug/L	4	4.00	---	98	53-123%	8	30%	
2,4,6-Trichlorophenol	3.67	0.200	0.400	ug/L	4	4.00	---	92	50-125%	7	30%	
Bis(2-ethylhexyl)phthalate	3.95	0.800	1.60	ug/L	4	4.00	---	99	55-135%	2	30%	
Butyl benzyl phthalate	3.82	0.800	1.60	ug/L	4	4.00	---	96	53-134%	3	30%	
Diethylphthalate	3.95	0.800	1.60	ug/L	4	4.00	---	99	55-125%	4	30%	
Dimethylphthalate	3.73	0.800	1.60	ug/L	4	4.00	---	93	45-127%	4	30%	
Di-n-butylphthalate	4.10	0.800	1.60	ug/L	4	4.00	---	102	59-127%	4	30%	
Di-n-octyl phthalate	3.97	0.800	1.60	ug/L	4	4.00	---	99	51-140%	6	30%	
N-Nitrosodimethylamine	2.08	0.100	0.200	ug/L	4	4.00	---	52	6-120%	13	30%	
N-Nitroso-di-n-propylamine	3.10	0.100	0.200	ug/L	4	4.00	---	78	49-120%	4	30%	
N-Nitrosodiphenylamine	3.77	0.100	0.200	ug/L	4	4.00	---	94	51-123%	4	30%	
Bis(2-Chloroethoxy) methane	3.74	0.100	0.200	ug/L	4	4.00	---	93	48-120%	9	30%	
Bis(2-Chloroethyl) ether	2.74	0.100	0.200	ug/L	4	4.00	---	69	43-120%	9	30%	
2,2'-Oxybis(1-Chloropropane)	2.75	0.100	0.200	ug/L	4	4.00	---	69	37-130%	6	30%	
Hexachlorobenzene	3.62	0.0400	0.0800	ug/L	4	4.00	---	90	52-125%	6	30%	
Hexachlorobutadiene	3.01	0.100	0.200	ug/L	4	4.00	---	75	22-124%	9	30%	
Hexachlorocyclopentadiene	3.23	0.200	0.400	ug/L	4	4.00	---	81	5-127%	6	30%	
Hexachloroethane	3.14	0.100	0.200	ug/L	4	4.00	---	78	21-120%	10	30%	
2-Chloronaphthalene	3.42	0.0400	0.0800	ug/L	4	4.00	---	86	40-120%	5	30%	
1,2-Dichlorobenzene	2.75	0.100	0.200	ug/L	4	4.00	---	69	32-120%	7	30%	
1,3-Dichlorobenzene	2.71	0.100	0.200	ug/L	4	4.00	---	68	28-120%	8	30%	
1,4-Dichlorobenzene	2.79	0.100	0.200	ug/L	4	4.00	---	70	29-120%	8	30%	
1,2,4-Trichlorobenzene	3.13	0.100	0.200	ug/L	4	4.00	---	78	29-120%	8	30%	
4-Bromophenyl phenyl ether	3.74	0.100	0.200	ug/L	4	4.00	---	93	54-124%	6	30%	
4-Chlorophenyl phenyl ether	3.58	0.100	0.200	ug/L	4	4.00	---	89	53-121%	3	30%	
Aniline	2.74	0.200	0.400	ug/L	4	4.00	---	69	6-120%	9	30%	
4-Chloroaniline	2.68	0.100	0.200	ug/L	4	4.00	---	67	33-120%	9	30%	
2-Nitroaniline	3.75	0.800	1.60	ug/L	4	4.00	---	94	54-127%	4	30%	
3-Nitroaniline	3.14	0.800	1.60	ug/L	4	4.00	---	78	41-128%	1	30%	
4-Nitroaniline	3.89	0.800	1.60	ug/L	4	4.00	---	97	35-120%	1	30%	
Nitrobenzene	2.92	0.400	0.800	ug/L	4	4.00	---	73	45-121%	4	30%	
2,4-Dinitrotoluene	3.92	0.400	0.800	ug/L	4	4.00	---	98	57-128%	5	30%	
2,6-Dinitrotoluene	3.89	0.400	0.800	ug/L	4	4.00	---	97	57-124%	4	30%	

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Philip Nerenberg, Lab Director



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: **[none]**

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071294 - EPA 3510C (Acid/Base Neutral)						Water						
LCS Dup (9071294-BSD1)						Prepared: 07/25/19 13:03 Analyzed: 07/25/19 19:44						Q-19
Benzoic acid	1.57	1.20	1.20	ug/L	4	8.00	---	20	5-120%	12	30%	Q-31
Benzyl alcohol	2.88	0.400	0.800	ug/L	4	4.00	---	72	31-120%	9	30%	
Isophorone	3.48	0.100	0.200	ug/L	4	4.00	---	87	42-124%	6	30%	
Azobenzene (1,2-DPH)	3.66	0.100	0.200	ug/L	4	4.00	---	92	61-120%	4	30%	
Bis(2-Ethylhexyl) adipate	3.74	1.00	2.00	ug/L	4	4.00	---	94	40-125%	1	30%	
3,3'-Dichlorobenzidine	11.0	2.00	4.00	ug/L	4	8.00	---	138	27-129%	7	30%	Q-29
1,2-Dinitrobenzene	3.71	1.00	2.00	ug/L	4	4.00	---	93	59-120%	6	30%	
1,3-Dinitrobenzene	3.69	1.00	2.00	ug/L	4	4.00	---	92	49-128%	2	30%	
1,4-Dinitrobenzene	3.74	1.00	2.00	ug/L	4	4.00	---	94	40-120%	6	30%	
Pyridine	1.76	0.400	0.800	ug/L	4	4.00	---	44	5-120%	16	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>												
			Recovery: 71 %	Limits: 44-120 %	Dilution: 4x							
<i>2-Fluorobiphenyl (Surr)</i>			84 %	44-120 %	"							
<i>Phenol-d6 (Surr)</i>			31 %	10-120 %	"							
<i>p-Terphenyl-d14 (Surr)</i>			97 %	50-133 %	"							
<i>2-Fluorophenol (Surr)</i>			45 %	19-120 %	"							
<i>2,4,6-Tribromophenol (Surr)</i>			97 %	43-140 %	"							

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071319 - EPA 3015A						Water						
Blank (9071319-BLK1)			Prepared: 07/26/19 10:44		Analyzed: 07/31/19 17:16							
EPA 6020A												
Antimony	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Beryllium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.0400	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Nickel	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Thallium	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	

LCS (9071319-BS1)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 17:20

<u>EPA 6020A</u>												
Antimony	27.1	0.500	1.00	ug/L	1	27.8	---	98	80-120%	---	---	
Arsenic	53.5	0.500	1.00	ug/L	1	55.6	---	96	80-120%	---	---	
Beryllium	26.5	0.100	0.200	ug/L	1	27.8	---	95	80-120%	---	---	
Cadmium	51.6	0.0400	0.200	ug/L	1	55.6	---	93	80-120%	---	---	
Chromium	55.4	0.500	1.00	ug/L	1	55.6	---	100	80-120%	---	---	
Copper	57.8	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Lead	50.9	0.100	0.200	ug/L	1	55.6	---	92	80-120%	---	---	
Mercury	1.03	0.0400	0.0800	ug/L	1	1.11	---	92	80-120%	---	---	
Nickel	57.1	0.500	1.00	ug/L	1	55.6	---	103	80-120%	---	---	
Selenium	27.0	0.500	1.00	ug/L	1	27.8	---	97	80-120%	---	---	
Silver	28.6	0.100	0.200	ug/L	1	27.8	---	103	80-120%	---	---	
Thallium	27.0	0.100	0.200	ug/L	1	27.8	---	97	80-120%	---	---	
Zinc	56.7	2.00	4.00	ug/L	1	55.6	---	102	80-120%	---	---	

Duplicate (9071319-DUP1)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 17:43

QC Source Sample: DP-2W (A9G0664-03)

EPA 6020A

Apex Laboratories

Philip Nerenberg, Lab Director

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071319 - EPA 3015A												
Water												
Duplicate (9071319-DUP1)												
Prepared: 07/26/19 10:44 Analyzed: 07/31/19 17:43												
QC Source Sample: DP-2W (A9G0664-03)												
Antimony	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Arsenic	1.03	0.500	1.00	ug/L	1	---	1.19	---	---	14	20%	
Beryllium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Cadmium	ND	0.0400	0.200	ug/L	1	---	ND	---	---	---	20%	
Chromium	0.783	0.500	1.00	ug/L	1	---	0.791	---	---	1	20%	J
Copper	1.11	0.500	1.00	ug/L	1	---	1.20	---	---	7	20%	
Lead	0.220	0.100	0.200	ug/L	1	---	0.237	---	---	8	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Nickel	2.56	0.500	1.00	ug/L	1	---	2.56	---	---	0.2	20%	
Selenium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Silver	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Thallium	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Zinc	4.03	2.00	4.00	ug/L	1	---	4.03	---	---	0.04	20%	

Matrix Spike (9071319-MS1)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 18:01

QC Source Sample: DP-2W (A9G0664-03)

EPA 6020A

Antimony	27.5	0.500	1.00	ug/L	1	27.8	ND	99	75-125%	---	---	
Arsenic	54.1	0.500	1.00	ug/L	1	55.6	1.19	95	75-125%	---	---	
Beryllium	28.8	0.100	0.200	ug/L	1	27.8	ND	104	75-125%	---	---	
Cadmium	59.1	0.0400	0.200	ug/L	1	55.6	ND	106	75-125%	---	---	
Chromium	55.6	0.500	1.00	ug/L	1	55.6	0.791	99	75-125%	---	---	
Copper	56.5	0.500	1.00	ug/L	1	55.6	1.20	99	75-125%	---	---	
Lead	54.9	0.100	0.200	ug/L	1	55.6	0.237	98	75-125%	---	---	
Mercury	1.13	0.0400	0.0800	ug/L	1	1.11	ND	101	75-125%	---	---	
Nickel	57.2	0.500	1.00	ug/L	1	55.6	2.56	98	75-125%	---	---	
Selenium	27.2	0.500	1.00	ug/L	1	27.8	ND	98	75-125%	---	---	
Silver	28.6	0.100	0.200	ug/L	1	27.8	ND	103	75-125%	---	---	
Thallium	26.7	0.100	0.200	ug/L	1	27.8	ND	96	75-125%	---	---	
Zinc	58.3	2.00	4.00	ug/L	1	55.6	4.03	98	75-125%	---	---	

Matrix Spike (9071319-MS2)

Prepared: 07/26/19 10:44 Analyzed: 07/31/19 19:22

Apex Laboratories

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Philip Nerenberg, Lab Director



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

GeoDesign, Inc.

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9071319 - EPA 3015A							Water					
Matrix Spike (9071319-MS2)			Prepared: 07/26/19 10:44		Analyzed: 07/31/19 19:22							
QC Source Sample: Non-SDG (A9G0752-01)												
EPA 6020A												
Antimony	40.3	5.00	10.0	ug/L	10	27.8	9.32	111	75-125%	---	---	Q-03
Arsenic	56.7	5.00	10.0	ug/L	10	55.6	ND	102	75-125%	---	---	
Beryllium	26.7	1.00	2.00	ug/L	10	27.8	ND	96	75-125%	---	---	
Cadmium	62.0	0.400	2.00	ug/L	10	55.6	ND	112	75-125%	---	---	
Chromium	77.2	5.00	10.0	ug/L	10	55.6	18.5	106	75-125%	---	---	
Copper	349	5.00	10.0	ug/L	10	55.6	269	144	75-125%	---	---	Q-03
Lead	52.6	1.00	2.00	ug/L	10	55.6	ND	95	75-125%	---	---	
Mercury	0.977	0.400	0.800	ug/L	10	1.11	ND	88	75-125%	---	---	
Nickel	125	5.00	10.0	ug/L	10	55.6	63.1	111	75-125%	---	---	
Selenium	27.2	5.00	10.0	ug/L	10	27.8	ND	98	75-125%	---	---	
Silver	169	1.00	2.00	ug/L	10	27.8	131	139	75-125%	---	---	Q-03
Thallium	27.6	1.00	2.00	ug/L	10	27.8	ND	99	75-125%	---	---	
Zinc	280	20.0	40.0	ug/L	10	55.6	212	123	75-125%	---	---	

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Wilsonville, OR 97070

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Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081139 - Matrix Matched Direct Inject						Water						
Blank (9081139-BLK1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:09							
EPA 6020A (Diss)												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	J, B-02
Copper	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Lead	0.132	0.100	0.200	ug/L	1	---	---	---	---	---	---	
LCS (9081139-BS1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:14							
EPA 6020A (Diss)												
Arsenic	52.6	0.500	1.00	ug/L	1	55.6	---	95	80-120%	---	---	B-02
Copper	53.7	0.500	1.00	ug/L	1	55.6	---	97	80-120%	---	---	
Lead	50.4	0.100	0.200	ug/L	1	55.6	---	91	80-120%	---	---	
Duplicate (9081139-DUP1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:53							
QC Source Sample: DP-1W (A9G0664-04)												
EPA 6020A (Diss)												
Arsenic	9.02	0.500	1.00	ug/L	1	---	9.17	---	---	2	20%	
Copper	7.79	0.500	1.00	ug/L	1	---	8.08	---	---	4	20%	
Lead	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	20%	
Matrix Spike (9081139-MS1)			Prepared: 08/20/19 08:21		Analyzed: 08/21/19 18:57							
QC Source Sample: DP-1W (A9G0664-04)												
EPA 6020A (Diss)												
Arsenic	59.3	0.500	1.00	ug/L	1	55.6	9.17	90	75-125%	---	---	B-02
Copper	55.2	0.500	1.00	ug/L	1	55.6	8.08	85	75-125%	---	---	
Lead	49.9	0.100	0.200	ug/L	1	55.6	ND	90	75-125%	---	---	

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AMENDED REPORT

GeoDesign, Inc.9450 SW Commerce Circle
Wilsonville, OR 97070Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: Kyle Haggart

Report ID:

A9G0664 - 08 29 19 1131

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071238							
A9G0664-02	Water	NWTPH-Dx	07/18/19 14:55	07/24/19 12:59	1060mL/5mL	1000mL/5mL	0.94
A9G0664-03	Water	NWTPH-Dx	07/18/19 16:35	07/24/19 12:59	1060mL/5mL	1000mL/5mL	0.94
A9G0664-04	Water	NWTPH-Dx	07/18/19 18:08	07/24/19 12:59	1060mL/5mL	1000mL/5mL	0.94

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

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071122							
A9G0664-02	Water	NWTPH-Gx (MS)	07/18/19 14:55	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-03	Water	NWTPH-Gx (MS)	07/18/19 16:35	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-04	Water	NWTPH-Gx (MS)	07/18/19 18:08	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071122							
A9G0664-01	Water	EPA 8260C	07/18/19 10:00	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-02	Water	EPA 8260C	07/18/19 14:55	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-03	Water	EPA 8260C	07/18/19 16:35	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-04	Water	EPA 8260C	07/18/19 18:08	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00
A9G0664-05	Water	EPA 8260C	07/18/19 12:00	07/22/19 11:05	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260C SIM

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080549							
A9G0664-02	Water	EPA 8260C SIM	07/18/19 14:55	08/01/19 15:08	5mL/5mL	5mL/5mL	1.00
A9G0664-03	Water	EPA 8260C SIM	07/18/19 16:35	08/01/19 15:08	5mL/5mL	5mL/5mL	1.00
A9G0664-04	Water	EPA 8260C SIM	07/18/19 18:08	08/01/19 15:08	5mL/5mL	5mL/5mL	1.00

Polychlorinated Biphenyls by EPA 8082A

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EPA ID: OR01039

AMENDED REPORT**GeoDesign, Inc.**

9450 SW Commerce Circle

Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart****Report ID:****A9G0664 - 08 29 19 1131****SAMPLE PREPARATION INFORMATION****Polychlorinated Biphenyls by EPA 8082A****Prep: EPA 3510C (Neutral pH)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071362							
A9G0664-02	Water	EPA 8082A	07/18/19 14:55	07/29/19 13:08	1050mL/2mL	1000mL/2mL	0.95
A9G0664-03	Water	EPA 8082A	07/18/19 16:35	07/29/19 13:08	1050mL/2mL	1000mL/2mL	0.95
A9G0664-04	Water	EPA 8082A	07/18/19 18:08	07/29/19 13:08	1030mL/2mL	1000mL/2mL	0.97

Semivolatile Organic Compounds by EPA 8270D**Prep: EPA 3510C (Acid/Base Neutral)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071208							
A9G0664-02RE2	Water	EPA 8270D	07/18/19 14:55	07/24/19 07:02	1060mL/1mL	1000mL/1mL	0.94
A9G0664-04RE1	Water	EPA 8270D	07/18/19 18:08	07/24/19 07:02	1070mL/1mL	1000mL/1mL	0.94
Batch: 9071294							
A9G0664-03RE2	Water	EPA 8270D	07/18/19 16:35	07/25/19 13:03	1070mL/1mL	1000mL/1mL	0.94

Total Metals by EPA 6020A (ICPMS)**Prep: EPA 3015A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9071319							
A9G0664-02	Water	EPA 6020A	07/18/19 14:55	07/26/19 10:44	45mL/50mL	45mL/50mL	1.00
A9G0664-03	Water	EPA 6020A	07/18/19 16:35	07/26/19 10:44	45mL/50mL	45mL/50mL	1.00
A9G0664-04	Water	EPA 6020A	07/18/19 18:08	07/26/19 10:44	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020A (ICPMS)**Prep: Matrix Matched Direct Inject**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9081139							
A9G0664-02	Water	EPA 6020A (Diss)	07/18/19 14:55	08/20/19 08:21	45mL/50mL	45mL/50mL	1.00
A9G0664-03	Water	EPA 6020A (Diss)	07/18/19 16:35	08/20/19 08:21	45mL/50mL	45mL/50mL	1.00
A9G0664-04	Water	EPA 6020A (Diss)	07/18/19 18:08	08/20/19 08:21	45mL/50mL	45mL/50mL	1.00

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AMENDED REPORT

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: **BCSAmerica-1-01-02**

Project Number: [none]

Project Manager: **Kyle Haggart**

Report ID:

A9G0664 - 08 29 19 1131

QUALIFIER DEFINITIONS

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

Apex Laboratories

- 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-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.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-03** Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-24** The RPD for this spike and spike duplicate is above established control limits. Recoveries for both the spike and spike duplicate are within control limits.
- Q-29** Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- 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-52** Due to erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.
- Q-54** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +12%. The results are reported as Estimated Values.
- Q-54a** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +15%. The results are reported as Estimated Values.
- Q-54b** Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by -14%. The results are reported as Estimated Values.
- Q-55** Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260C, however there is adequate sensitivity to ensure detection at the reporting level.
- Q-56** Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C
- S-06** Surrogate recovery is outside of established control limits.
- V-01** Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

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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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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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Project Manager: **Kyle Haggart**

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LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

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

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 provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A9 G0664Project/Project #: BCSAmerica-1-01-02

Delivery Info:

Date/time received: 7/19/19 @ 1503 By: AKKDelivered by: Apex ☒ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐Cooler Inspection Date/time inspected: 7/19/19 @ 1503 By: AKKChain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒Signed/dated by client? Yes ☒ No ☐Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.5</u>	<u>1.0</u>					
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>					
Temp. blanks? (Y/N)	<u>N</u>	<u>N</u>					
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>					
Condition:	<u>Good</u>	<u>Good</u>					

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 ☒ NAOut of temperature samples form initiated? Yes/No ☒ NASamples Inspection Date/time inspected: 7/20/19 @ 1035 By: JSAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☐ NA ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments:

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐

Comments:

Additional information:

Labeled by: W Witness: JS Cooler Inspected by: MK See Project Contact Form: Y

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