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Focused Feasibility Study and Cleanup Action Plan

Perine Property – Former Northwest Plating Site
812 and 820 South Adams Street
Seattle, Washington
Facility Site ID 2231
VCP Site ID NW2769

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TABLE OF CONTENTS

TABLES

FIGURES

ATTACHMENTS

ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
AL	Action Level
bgs	Below ground surface
CAP	Cleanup Action Plan
CID	Contained-In Determination
COC	Constituent of concern
COPC	Constituent of potential concern
CSM	Conceptual site model
CUL	Cleanup level
DCA	Disproportionate Cost Analysis
EC	Environmental Covenant
Ecology	Washington State Department of Ecology
EPI	Environmental Partners, Inc.
ERD	Enhanced reductive dechlorination
FFS	Focused Feasibility Study
HASP	Health and Safety Plan
IRA	Interim Remedial Action
µg/L	Micrograms per liter
µg/m^3	Micrograms per cubic meter
mg/kg	Milligrams per kilogram
MTCA	Model Toxics Control Act (70.105D) and its implementing regulations (Washington Administrative Code [WAC] 173-340)
PS-NFA	Property-Specific No Further Action
PCE	Tetrachloroethene
PVC	Polyvinyl chloride
RAO	Remedial Action Objective
RCW	Revised Code of Washington
REL	Remediation level
RI	Remedial Investigation
RME	Reasonable Maximum Exposure
RTF	Restoration Time Frame
SAP	Sampling and Analysis Plan
SES	SoundEarth Strategies
SVE	Soil vapor extraction
TCE	Trichloroethene
VCP	Voluntary Cleanup Program
VI	Vapor intrusion
WAC	Washington Administrative Code
WII	Washington Industries, Inc.

1.0 INTRODUCTION

Environmental Partners, Inc. (EPI) is pleased to submit this *Focused Feasibility Study and Cleanup Action Plan* (FFS/CAP) for a portion of the Former Northwest Plating Site located at 825 South Dakota Street and 812 and 820 South Adams Street in Seattle, Washington (Site). This FFS/CAP is specific to the southern portion of the Site known as the Perine Property which comprises 812 and 820 South Adams Street in Seattle, Washington. The location of the Perine Property is indicated on Figure 1.

This FFS/CAP has been prepared on behalf of the Washington Industries Environmental Remediation Trust (WIERT), which is the entity implementing the ongoing investigation and remediation of the Site. With the submission of this FFS/CAP, WIERT is soliciting an Advisory Opinion on the FFS/CAP and an opinion that upon implementation of the selected remedy, the Perine Property portion of the Site will receive a restricted Property-Specific No Further Action (PS-NFA) determination. It is currently anticipated that the restrictions will consist of an Environmental Covenant (EC) to address residual inaccessible impacts to soil only.

The Site is listed in the Washington State Department of Ecology (Ecology) facility/site database as Facility/Site ID No. 2231 and is enrolled in Ecology's Voluntary Cleanup Program (VCP) as VCP Site No. NW2769. The Perine Property is an affected property related to the larger Former Northwest Plating Site.

The *Remedial Investigation Report* for the Site dated June 28, 2016 (RI Report; EPI 2016b) was previously submitted to Ecology as a component of enrolling the Site into the VCP. The Ecology Site Manager is Ms. Heather Vick. As documented in the RI Report, historical releases on the Former Northwest Plating property have resulted in impacts to soil, soil gas, groundwater, and indoor air on the Perine Property. A limited amount of soil on the Perine Property was impacted with trichloroethene (TCE) at concentrations exceeding the applicable cleanup level.

Interim remedial actions (IRAs) were implemented on the Washington Industries, Inc. (WII) Property located at 825 South Dakota Street by EPI in 2016 and 2017. Those IRAs are currently ongoing. The IRAs utilize a combination of soil vapor extraction (SVE) and enhanced reductive dechlorination (ERD) technologies to reduce contaminant mass in soil and groundwater and mitigate vapor intrusion (VI) risks at the Site, including the Perine Property. The Site, including the Perine Property, has been undergoing quarterly groundwater monitoring since 2015. The IRAs and quarterly groundwater monitoring have been documented in numerous reports that were submitted to Ecology under the VCP. The results of groundwater monitoring and IRA operation will continue to be reported to Ecology on a routine basis until a No Further Action (NFA) determination for the Site has been achieved.

This FFS/CAP has been prepared in accordance with the Washington State Model Toxics Control Act (Chapter 70.105D Revised Code of Washington [RCW]) and its implementing regulations (Chapter 173-340 Washington Administrative Code [WAC]), collectively referred to as "MTCA," and in conformance with the combined elements contained in the FS and CAP Checklist Guidance provided by Ecology. For the purpose of this document, and as defined in MTCA, the "Site" shall mean all areas where contaminants released from the former Northwest Plating facility have come to be located.

As noted above, this FFS/CAP is specific to the Perine Property. The FFS/CAP summarizes the results of environmental investigations and actions conducted at the Site, evaluates cleanup alternatives for the Perine Property portion of the Site, selects a cleanup action that meets the requirements of MTCA and is protective of human health and the environment, and presents a plan for implementation of the selected cleanup action. The selected cleanup action will be implemented as an independent remedial action in accordance with the requirements of MTCA and in support of obtaining a PS-NFA designation for the Perine Property.

1.1 Site and Property Description

The Site is located approximately 3 miles south of downtown Seattle along the eastern margin of the lower Duwamish River industrial area. It is outside the Lower Duwamish Superfund Site boundary, which is approximately 1.1 miles to the west.

The Site consists of the WII property at 825 South Dakota Street (the location of the former Northwest Plating facility) and includes the south-adjacent Perine Property as well as other properties to the west and north. The lateral and vertical extent of the Site were fully characterized by the RI completed between 2013 and 2016 and documented in the 2016 RI Report (EPI 2016b). The lateral extent of the Site is identified on Figure 2. The reviewer is referred to the RI Report for additional detail regarding the Site investigation and characterization.

The Perine Property, which is the subject of this FFS/CAP, is identified in the King County property records as Tax Parcel Number 788610-1280. The Perine Property is 0.85 acre and has been improved with two buildings, “Building 1” and “Building 2.” Building 1 was constructed in 1957 and is a two-story brick and masonry building with a wood roof. Building 2 was constructed in 1996 and is a two-story prefabricated steel and reinforced concrete-framed structure with a metal roof located on the west side of Building 1. Prior to 1996, two historical buildings existed in the area where Building 2 is now located. The historical buildings date back to the early 1920s and early 1940s.

1.2 Perine Property Use and History

The Perine Property went through various stages of development and redevelopment through the 1900s. As noted above, the Perine Property currently consists of two buildings constructed in 1957 and 1996 respectively. The majority of the Perine Property is currently occupied by the Pacific Northwest Ballet, which uses the space for the storage of equipment. Additional smaller lease spaces within the buildings are used for workspaces and offices. The known historical operations at the Perine Property include a winery, a beverage distribution company, a warehouse and machine shop, and an emergency response equipment refurbishing operation. According to the Phase I Environmental Site Assessment prepared by SoundEarth Strategies (SES), the machine shop reportedly operated between 1957 and 1974 (SES 2011a).

1.3 Summary of Environmental Investigations and Interim Actions

Several investigations and environmental actions have been performed at the Site since 1989. Details and results of the actions performed through 2012 were documented in several reports prepared by

others and summarized in EPI's RI Report along with details of subsequent RI activities performed by EPI (EPI 2016).

An interim action to address impacted soil, groundwater, and indoor air at the Site has been ongoing since 2016. Environmental activities involving the Perine Property have been performed since 2011 and are generally summarized as follows:

- A subsurface investigation was conducted by SES during March and April 2011 (SES 2011b), which included collection and analysis of soil and groundwater samples on the northern portion of the Perine Property immediately adjacent to the WII Property. The assessment identified tetrachloroethene (PCE) in soil at a concentration of 0.34 milligrams per kilogram (mg/kg) and TCE in soil at concentrations of 0.10 and 9.1 mg/kg. Neither PCE nor TCE were detected in groundwater on the Perine Property.

- VI assessments were performed by SES in June 2011 and November 2011 (SES 2011c and 2012a). The assessments included the collection of five indoor air samples and an exterior background air sample, and performance of a passive soil gas survey. PCE was detected in indoor air at concentrations ranging from 0.21 to 1.3 micrograms per cubic meter (µg/m^3) and TCE was detected in indoor air at concentrations ranging from 0.42 to 1.7 µg/m^3.

- A groundwater assessment was performed by SES in June and July 2011, which included limited soil sampling along with groundwater sampling to further characterize the nature and extent of contaminants beneath the Perine Property (SES 2011d). PCE and TCE were detected in soil at concentrations of 0.15 mg/kg and 4.0 mg/kg, respectively, and in groundwater at 1.1 micrograms per liter (µg/L) and 81 µg/L, respectively.

- A pilot test was conducted by SES in September 2012 to assess the viability of addressing potential VI into the Perine Property buildings through vacuum capture beneath the floor slab (SES 2012b). The test indicated that a sub-slab depressurization system would be capable of mitigating VI into indoor air at the Perine Property, but would not be practical due to the estimated size and cost of such a system.

- RI activities were conducted by EPI between 2013 and 2016 to complete characterization of the Site (EPI 2016). The activities included additional assessment of soil and groundwater on the Perine Property and assessment of sub-slab soil vapors beneath the two Perine buildings. PCE concentrations generally did not exceed the laboratory reporting limits in soil or groundwater, except for scattered minor concentrations ranging from 0.013 to 0.030 mg/kg in soil and from 1.1 to 16 µg/L in groundwater. TCE was more prevalent, with concentrations ranging from 0.010 to 20 mg/kg in soil and from 2.3 to 890 µg/L in groundwater. Consistent with soil and groundwater results, sub-slab soil vapors were also predominantly impacted with TCE, with detected concentrations ranging from 2.4 to 150,000 µg/m^3. The RI concluded that while the impacts to groundwater and sub-slab vapor at the Perine Property were likely associated with historical releases on the WII Property, the isolated TCE impacts in shallow soil on the Perine Property are unrelated to historical operations on the WII Property. The RI concluded that, based on their location, the isolated TCE impacts in shallow soils were

attributed to a machine shop that had historically operated on the western portion of the Perine Property.

- IRAs were implemented on the WII Property by EPI in 2016 and 2017 that utilize a combination of SVE and ERD technologies to reduce contaminant mass in soil and groundwater at the Site and mitigate VI risks. ERD was initially implemented in December 2016 with additional ERD injections in August 2017. The first phase of SVE was implemented with SVE System 1 in May 2017 and was expanded with SVE System 2 in November 2017. These technologies were primarily installed on the WII Property, but have effectively decreased contaminant concentrations in soil, soil gas, and groundwater throughout the Site, including the Perine Property. Both SVE systems continue to operate and are monitored on a monthly basis. The IRAs are documented in detail in the *Interim Action Work Plan* dated April 18, 2016 and the *Interim Action System As-Built and Startup Report* dated April 17, 2018 (EPI 2016a and 2018a). Those reports were submitted to Ecology through the VCP. Future reports for activities on the WII Property will be submitted to the VCP.

- Quarterly groundwater monitoring and sampling has been performed at the Site, including on the Perine Property, by EPI since 2015. Details of the quarterly events performed through February 2019 are documented in annual groundwater monitoring reports dated May 19, 2017, June 5, 2018, and July 17, 2019 (EPI 2017, 2018b, and 2019). The monitoring data collected to date confirm that TCE and all other compounds have either not been present at detectable concentrations, or when detected, have been present at concentrations less than the respective cleanup levels in groundwater on the Perine Property since at least February 2018, with one exception. The groundwater sample collected from monitoring well MW-05s located on the Perine Property on February 26, 2019 had a reported TCE concentration of 9.4 µg/L. The TCE concentration in this sample slightly exceeds the Site-specific CUL for TCE of 8.4 µg/L. This is the only reported TCE concentration in groundwater samples from MW-05s to exceed the Site-specific CUL between February 28, 2017 and the most recent sampling event on July 30, 2019. The most recent two results were 3.4 µg/L and less than the laboratory sample quantitation limit of 2.0 µg/L, respectively. The available data indicate a long duration trend of groundwater quality in compliance with the CUL and strongly suggest that the TCE concentration reported for February 2019 was anomalous. Annual groundwater monitoring reports have been submitted to Ecology through the VCP. Groundwater monitoring is ongoing and future reports will also be provided to Ecology.

Soil, groundwater, and soil vapor sampling data associated with the Perine Property are summarized in Tables 1 through 3, respectively. Sampling locations are shown on Figure 3. The reviewer is directed to the source documents for additional detail.

1.4 Nature and Extent of Contamination

Shallow soil in a very limited area on the Perine Property is impacted with TCE at concentrations exceeding the Site-specific REL of 0.2 mg/kg. Those impacts are limited to an isolated area within the northwestern portion of the Perine Property, at depths between 2.5 feet and 5 feet below grade. The

lateral and vertical extent of TCE-impacted soil has been very well characterized. The approximate area of impacted soil is illustrated on Figures 4 and 5. Figure 6 presents an interpretive cross-section of vadose zone impacts in this area based on soil conditions pre-dating the IRAs.

Inside Building 1 on the Perine Property, the floor surface is approximately 6 feet higher in elevation than the exterior surface grade. Inside Building 2 (west of Building 1), the floor surface is approximately 2 feet higher in elevation than the exterior surface grade (i.e., approximately 4 feet lower in elevation than the floor of Building 1). As such, the impacted soil beneath the buildings appears to be primarily within fill material above and/or just below the surrounding surface grade, while the depth of impacted soil beneath the exterior asphalt surface (west of Building 2) is deeper than the impacts detected beneath the buildings. The RI data confirm that the impacted soil is above the shallow groundwater table.

At the time of the RI and prior to the successful implementation of the IRAs, groundwater on the Perine Property was impacted with TCE as a result of historical releases associated with the WII Property. During the RI, TCE was detected on the Perine Property at concentrations up to 890 µg/L. Since implementation of the IRAs, groundwater quality on the Perine Property has significantly improved and TCE concentrations have remained at very low to non-detectable levels for the last two years.

There are 11 monitoring wells on the Perine Property that have been monitored on a quarterly to annual basis since June 2015. All groundwater quality on the Perine Property has complied with the Site-specific cleanup level for TCE of 8.4 µg/L since at least February 2018, with the exception of one TCE concentration detected at MW-05 in February 2019 that slightly exceeded the cleanup level. Table 2 contains a summary of groundwater monitoring data for the Perine Property wells. A copy of the laboratory analytical data for the most recent monitoring event performed in July 2019 is provided in Attachment A.

Sub-slab soil vapors on the Perine Property were significantly impacted with TCE during the RI. The source of those vapors was likely shallow impacted groundwater. As noted, the impacts to groundwater have been remediated. Additionally, the SVE system operating at the WII Property provides an added level of protection for mitigating potential VI risks. The combination of remediating groundwater on the Perine Property, which eliminates the source of VOCs in soil vapor, and operation of the SVE system, which removes previously impacted soil gas, are expected to have fully mitigated the VI exposure pathway on the Perine Property.

Lastly, indoor air samples collected at the Perine Property in 2011 prior to the implementation of the IRA indicated that detected concentrations of PCE and TCE in indoor air at the Perine Property did not exceed the corresponding MTCA Method C cleanup values for these analytes for either carcinogenic or noncarcinogenic effects (SES 2012a). Those prior indoor air sampling results also likely represent a worst-case condition because they did not include collection of an ambient/background air sample and did not account for the potential contribution of TCE to indoor air from the material stored at the Perine Property at the time. At that time, the Perine Property was used for wholesaling and storage of freshly machined and manufactured nuts, bolts, and small parts.

1.5 Conceptual Site Model

A pre-remedial conceptual site model (CSM) was developed for the Site and presented in the RI Report. The CSM identified current and potential future exposure pathways for human and ecological receptors based on the data collected at the Site through completion of the RI in 2016.

For the purposes of this FFS/CAP, the CSM as it relates solely to the Perine Property and as it relates to current conditions is presented below and takes into consideration additional data collected to date since completion of the RI as well as a component of the IRAs and the ongoing quarterly groundwater monitoring. The CSM for the Perine Property includes the following:

- The Perine Property and surrounding land are zoned as Industrial General 2 (IG2). The Perine Property is currently used for industrial purposes and will continue to be used as such for the foreseeable future. The Perine Property qualifies as an Industrial Property under MTCA.

- Subsurface conditions consist predominantly of fine- to medium-grained sand with trace silt and gravel from the surface to depths of approximately 10 to 15 feet below ground surface (bgs). Underlying the sand is an approximate 10-foot-thick aquitard. A second 5-foot-thick to 10-foot-thick silty sand stratum was encountered beneath the silt layer. Deeper borings suggest that a second silt interval is present from approximately 35 to 52 feet bgs followed by a dense, plastic clay from 52 feet bgs to the terminal depth of the borings at 90 feet bgs. A layer of fill, brick, and building rubble is present beneath the western portion of the buildings on the Perine Property.

- TCE is the only constituent of potential concern (COPC) for the Perine Property. The remaining impacts to soil in the western portion of the Perine Property are presumed to have originated from historical releases associated with the machine shop that operated on the property between the 1950s and 1970s.

- Soil is the only current environmental medium of concern for the Perine Property. Based on groundwater sampling data collected to date, impacts to groundwater at the Perine Property have been fully remediated and are in compliance with applicable cleanup levels. Therefore, groundwater is no longer a medium of concern for the Perine Property.

- With the implementation of the IRA that included SVE and ERD on the WII Property and demonstrated remediation of groundwater on the Perine Property, it is anticipated that the VI pathway on the Perine Property has been eliminated.

- The IRAs have been highly effective at addressing impacts to groundwater on the Perine Property. Historical deep soils samples within the range of seasonal water table fluctuations on the Perine Property at soil borings B-36 and B-44 contained TCE at a concentration exceeding a CUL. The impacted soil samples were below the water table and the observed impacts were attributed to the presence of contaminated groundwater in those locations. With the remediation of groundwater, it is anticipated that those impacts have also been

addressed. The lack of detection of TCE in groundwater in any wells on the Perine Property is additional confirmation that residual impacts to soil are no longer present.

- The Site and surrounding properties are supplied with water by the City of Seattle municipal water system. The City of Seattle has an ordinance restricting the use of groundwater as a drinking water source in this industrial area of Seattle, and drinking water wells are not lawfully authorized in the Site vicinity. Additionally, and as noted above, groundwater at the Perine Property is not currently impacted. Furthermore, the Perine Property is hydraulically upgradient of the WII Property and its associated residual impacts to groundwater. Accordingly, there is no reasonable potential for the Perine Property to become recontaminated by residual impacts on the WII Property that remain the subject of active remedial actions. Therefore, groundwater is no longer a medium of concern at the Perine Property and there is not potential for exposure through ingestion or dermal contact. It is currently anticipated that the IRAs on the WII Property will continue to operate until that property has received an NFA determination.

- Due to the industrial zoning and groundwater withdrawal restrictions in the Site vicinity, there is no potential for current or future residential exposures at the Site.

- The nearest downgradient surface water body is located over 1 mile from the Site, and there is no realistic potential for Site groundwater to adversely impact surface water. Therefore, exposure pathways related to surface water and sediment are not considered complete at this Site.

- Based on pre-remedial indoor air quality data, indoor air at the Perine Property was not impacted to concentrations exceeding applicable cleanup levels even prior to implementation of the IRA at the WII Property. While not necessary for protection of the Perine Property, the implementation of SVE on the WII Property provides an added level of protection for the VI pathway. Therefore, indoor air is not a medium of concern for the Perine Property.

- Potential human health exposures at the Perine Property are limited to direct contact with residual TCE-impacted soil in a limited and localized area during a potential future redevelopment or construction scenario.

- Based on WAC 173-340-7490, the Perine Property qualifies for an exclusion from the terrestrial ecological evaluation (TEE) based on full surface cover by asphalt, concrete, and/or buildings. Additionally, the Perine Property would qualify for a TEE exclusion based on the lack of surrounding contiguous undeveloped land.

1.6 Cleanup Standards

Cleanup standards include cleanup levels (CULs), remediation levels (RELs), and remedial action levels (RALs) that are adequately protective of human health and the environment, and the point of compliance at which those levels must be met. The cleanup standards are used as the basis for developing media-specific remedial action objectives for the cleanup action.

1.6.1 Cleanup Level Development

During the RI, CULs for affected media at the Site were evaluated in accordance with MTCA and take into consideration exposure pathways and receptors based on current and likely future uses of the Site. Based on current and expected future use of the Site and the Perine Property, only exposure pathways for human receptors were considered for the development of applicable CULs.

MTCA also allows for the development of RELs based on Site-specific exposures as indicated by the CSM. RELs are based on a Reasonable Maximum Exposure (RME) for the highest level of exposure and risk that can reasonably be anticipated at a Site. RELs are, by definition, greater than CULs. Both CULs and RELs must address all exposure pathways.

Applicable CULs and RELs were developed for the Site in Section 6.0 of the RI Report and are included for reference in Tables 1 through 3 (EPI 2016). Those CULs and RELs are based on industrial uses and take into consideration direct contact exposures to soil as well as potential VI exposure pathways from soil and groundwater to indoor air.

The selected CULs and RELs must be protective of human health and the environment after completion of the selected remedial action and implementation of institutional and/or engineering controls (if any) and must consider the exposure pathways that remain after remedy implementation.

1.6.2 Points of Compliance

A point of compliance is that point or location on a property where the CULs must be attained in each medium of concern. The points of compliance for the Site were established in accordance with WAC 173-340-740(6) for soil, WAC 173-340-720(8) for groundwater, and WAC 173-340-750(6) for indoor air. The point of compliance for soil is all soil throughout the Site, the point of compliance for groundwater is all groundwater throughout the Site, and the point of compliance for indoor air is all ambient air throughout the interior of structures at the Site.

1.6.3 Final Constituents of Concern and Cleanup Levels

Final constituents of concern (COCs) for the Perine Property are those COPCs that were detected in media of concern at concentrations exceeding the applicable CULs or RELs. Based on the data collected to date, TCE is the only COC for the Perine Property.

The applicable CULs and RELs for TCE at the Site are summarized as follows:

Medium of Concern for Site	Applicable CUL	Applicable REL	Basis
Soil	0.05	0.2	CUL based on MTCA Method C developed for the soil-groundwater-indoor air pathway; REL based on a construction worker RME scenario
Groundwater	8.4	37	CUL based on MTCA Method C developed for the groundwater-indoor air pathway; REL based on a construction worker RME scenario
Indoor Air	2.0	8.8	CUL based on MTCA Method C developed for protection of indoor air; REL based on a construction worker RME scenario

Site data confirm that TCE concentrations in groundwater and indoor air at the Perine Property currently comply with the applicable CULs.

2.0 FEASIBILITY STUDY

2.1 Applicable Regulations

The work documented herein is intended to comply with the laws and regulations of the State of Washington. The work to be performed during implementation of a selected remedy will be performed under the VCP and will comply with MTCA (70.105D RCW) and its implementing regulations (WAC 173-340). Applicable or Relevant and Appropriate Requirements (ARARs) for the selected remedy will be MTCA, and all potential exposure pathways will be addressed. This FFS/CAP summarizes the fully MTCA-compliant CUL development presented within Section 6.0 of the RI Report. Therefore, further consideration of ARARs is not warranted and MTCA has been selected as the regulation with primacy for this project.

2.2 Remedial Action Objectives

Remedial action objectives (RAOs) have been established for the Perine Property to provide the technical basis for evaluating remedial alternatives that protect human health and the environment under the MTCA cleanup process (WAC 173-340-350). Based on the assessment of conditions at the Site and the CULs and RELs presented in Section 1.6.3, the RAOs for the Perine Property have been established as follows:

- Prevent human exposure to soil exhibiting concentrations of TCE in excess of the applicable REL identified in Section 1.6.3.

- If feasible, reduce concentrations of TCE in soil to levels protective of human health and the environment.

The RAOs are of primary importance to the evaluation of the general response actions, technologies, process options, and cleanup action alternatives presented in this FFS/CAP.

2.3 Analysis of All Known, Available, and Reasonable Technologies

Based on the physical conditions at the Site, the available remedial options are limited. Typically, general response actions that are applicable to most impacted sites include the following:

- No action;
- Institutional controls;
- Containment;
- Removal;
- *Ex situ* treatment; and
- *In situ* treatment.

Potentially applicable technologies associated with these general response actions were identified and screened based on the COC and affected medium at the Perine Property, and take into consideration the current and future use of the property. The remedial alternatives under evaluation herein are based on the response actions and applicable technologies, and are presented in Section 2.4 below.

2.4 Description of Remedial Alternatives

As noted above, the currently available information for the Perine Property confirms that groundwater beneath the Perine Property is no longer impacted with COCs at a concentration exceeding an applicable CUL. Similarly, indoor air is not impacted at a concentration exceeding an applicable CUL. The only remaining impacts on the Perine Property consist of a shallow and isolated area of TCE-impacted soil as indicated on Figure 2.

EPI evaluated the following remedial alternatives to address the remaining TCE impacts to shallow soil at the Perine Property. This evaluation is based upon EPI's experience, best professional judgment, and the application of established engineering and scientific principles to the known and available data.

The following three remedial alternatives were evaluated as part of this FFS/CAP:

- Alternative 1 – Remedial Excavation
- Alternative 2 – *In Situ* Treatment
- Alternative 3 – Institutional Controls

Descriptions of each of the alternatives are provided below.

2.4.1 Alternative 1 – Remedial Excavation

This alternative consists of excavation and off-Site disposal of all TCE-impacted soil on the Perine Property that exceeds the site-specific CUL of 0.05 mg/kg. The estimated lateral extent of TCE-impacted soil requiring removal is shown on Figure 4. This alternative assumes that impacted soil will be excavated to a depth of approximately 6 feet beneath the floors of Buildings 1 and 2 and to a depth of approximately 6 feet bgs west of the buildings.

For Alternative 1 it is assumed that remediation would consist of removal, off-Site disposal, and replacement of approximately 800 cubic yards of TCE-impacted soil. Portions of the floor and interior footings within the affected area of each building would need to be removed in order to access the impacted soil for removal. The exterior asphalt pavement west of Building 2 on the Perine Property would also require removal prior to excavating impacted soil. Removal of any impacted soil from the rail spur easement would require an access agreement. Following removal and replacement of impacted soil, all asphalt, concrete, and other affected structures would be restored to pre-existing conditions.

For implementation of this alternative, it is assumed that a small excavator would be used within each of the building spaces as well as in the area outside to the west. For disposal purposes there would be two types of soil:

- Type 1 – Contains TCE concentrations less than 10 mg/kg. These soils are contaminated but would be disposed as non-hazardous under a Contained-In Determination (CID).

- Type 2 – Contains TCE concentrations at 10 mg/kg to 60 mg/kg. These soils would be disposed as Hazardous Waste but would not require treatment prior to disposal.

Of the total quantity of TCE-impacted soil to be removed, it is estimated that approximately 10 cubic yards would be classified as Type 2.

The general scope of Alternative 1 would consist of the following:

- Prepare an Engineering Design Report and Work Plan;
- Prepare a Sampling and Analysis Plan (SAP) and a Health and Safety Plan (HASP);
- Obtain appropriate construction permits;
- Obtain a CID from Ecology for disposal of Type 1 soils;
- Saw cut, remove, and dispose of approximately 1,700 square feet of concrete flooring;
- Saw cut, remove, and dispose of approximately 800 square feet of asphalt pavement;
- Excavate and dispose of 790 cubic yards of Type 1 soil and 10 cubic yards of Type 2 soil;
- Sample and analyze excavated soil to document soil conditions for disposal;
- Sample and analyze soil from the limits of the excavation;
- Import, place, and compact clean backfill in the excavated areas;
- Restore concrete flooring and asphalt pavement surfaces to pre-existing conditions; and
- Prepare a final Cleanup Action Report requesting a property-specific NFA determination from Ecology.

2.4.2 Alternative 2 – *In Situ* Treatment

This remedial alternative consists of active soil remediation using *in situ* SVE treatment technology in the area of TCE-impacted soil on the Perine Property. Under an induced vacuum, SVE will volatilize and physically remove sorbed contaminants from the soil to reduce concentrations of residual contaminants.

For Alternative 2, a regenerative vacuum blower would be used to apply vacuum to a small network of vertical and horizontal SVE wells to extract soil vapors and facilitate contaminant mass removal. Two

vertical SVE wells would be installed west of Buildings 1 and 2 to a depth of 8 feet below the asphalt pavement surface. Four horizontal SVE wells would be installed within the buildings at a depth of approximately 4 feet below the concrete floor surface. A 15-foot radius of influence for SVE is assumed for this alternative based on observations and data from the systems operating on the adjacent WII Property. A conceptual layout of the SVE wells is depicted on Figure 5.

The vertical wells would be installed using hollow-stem auger drilling technology and constructed of 4-inch diameter polyvinyl chloride (PVC) with a 5-foot length of slotted well screen placed at the bottom and blank riser above the screen. The horizontal wells would be installed within shallow trenches and constructed of 4-inch diameter PVC slotted screen. Three of the horizontal wells would be approximately 30 feet in length, constructed with two 15-foot lengths of slotted screen teed at the center with 2-inch PVC blank riser pipe. The fourth horizontal well would be approximately 16 feet in length, constructed with two 8-foot lengths of slotted screen teed at the center with 2-inch PVC blank riser pipe. Vapor conveyance piping would be connected to each well and routed to a fenced equipment enclosure located outside near the northwest corner of Building 2.

Extracted soil vapors would be treated through granular activated carbon (GAC) filters prior to discharge to the atmosphere. It is assumed that vapor-phase GAC would be used for vapor treatment and would require changeout at least twice during operation of the SVE system. Spent GAC would be disposed of as hazardous waste at an appropriate facility.

The system would require monthly operation and maintenance and monitoring of system vapors until extracted TCE concentrations are no longer detected. Performance monitoring would primarily consist of monthly sampling and analysis of SVE system influent and effluent vapors and checking operational parameters of the system. It is assumed that the SVE system would need to operate for up to 2 years to remediate remaining TCE-impacted soil on the Perine Property. Following completion of SVE and shutdown of the system, soil sampling would be conducted to demonstrate compliance with the CUL for TCE.

The general scope of Alternative 2 would consist of the following:

- Prepare an Engineering Design and Work Plan;
- Prepare a SAP and HASP;
- Obtain construction permits for excavating SVE trenches;
- Obtain an air permit for treated vapor discharges, if required;
- Prepare the property with appropriate safety and security measures;
- Drill and install vertical SVE wells;
- Saw cut and remove surface asphalt and concrete from trenching locations;
- Excavate trenches for horizontal SVE wells and vapor conveyance piping;
- Install horizontal SVE wells and vapor conveyance piping;
- Backfill trenches and restore ground surfaces to pre-existing conditions;
- Procure and set up aboveground SVE equipment and carbon treatment vessels, and connect SVE piping to equipment;
- Prepare an As-Built Report documenting system installation and startup activities;

- Operate the SVE system for approximately 2 years with monthly maintenance and monitoring of system vapors;
- Perform compliance soil sampling after shutting down SVE system; and
- Prepare a final Cleanup Action Report requesting a PS-NFA determination from Ecology.

2.4.3 Alternative 3 – Institutional Controls

This remedial alternative consists of implementing institutional controls to limit exposures to remaining impacts. The asphalt and concrete surfaces would serve as a cap over the remaining impacted soils, thereby eliminating the potential exposure pathways.

For Alternative 3, it is assumed that an Environmental Covenant (EC) would be implemented for the Perine Property that imposes restrictions on the use of the affected portion of the land such that it cannot be redeveloped unless the remaining impacted soils are removed/remediated as a component of the redevelopment. Land use restrictions would remain in force until TCE concentrations decrease to levels less than the CUL. The EC will be approved by Ecology and ultimately recorded with the King County Recorder's Office as an attachment to the Perine Property deed.

The EC will address the northwest portion of the Perine Property where soil contains TCE concentrations greater than the Site-specific CUL of 0.05 mg/kg. The EC would also include deed notifications to inform future property owners and users of the presence of contamination. In addition, the EC will include an Operations and Maintenance Plan for maintenance of the cap materials and a Contingency Plan for additional contingent actions if the caps are breached or deteriorate to the point where they are no longer protective.

If implemented, this remedy may need to be altered in the future if redevelopment of the affected property is desired before TCE concentrations reduce to levels that comply with the CUL. The EC will require the submittal of a Work Plan for remedy implementation during redevelopment. That Work Plan must be submitted to Ecology for review and approval prior to implementation.

The general scope of Alternative 3 would consist of the following:

- Prepare an EC according to Ecology's template;
- Ecology review and approval of the EC;
- Record the EC with King County;
- Prepare a final Cleanup Action Report documenting the implementation of the selected remedy and requesting a PS-NFA determination from Ecology; and
- Ecology grants the PS-NFA.

2.5 MTCA Threshold Requirements

A selected cleanup action must satisfy the requirements of WAC 173-340-360(2). These requirements include both threshold requirements (WAC 173-340-360(2)(a)) and other requirements (WAC 173-340-360(2)(b)). The threshold requirements include:

- Protection of human health and the environment;
- Compliance with cleanup standards;
- Compliance with applicable state and federal laws; and
- Provisions for compliance monitoring.

Other requirements include:

- Use of permanent solutions to the maximum extent practicable;
- Provisions for a reasonable restoration time frame; and
- Consideration of public concerns.

2.6 Evaluation of Remedial Alternatives

This section presents an evaluation and comparison of the proposed remedial alternatives for selecting the preferred cleanup action for the Perine Property. In accordance with MTCA, the alternatives are evaluated relative to the criteria and sub-criteria specified in WAC 173-340-360(3)(f) and WAC 173-340-360(4), which include the following:

- Protectiveness;
- Permanence;
- Effectiveness over the long term;
- Management of short-term risks;
- Technical and administrative implementability;
- Consideration of public concerns;
- Restoration time frame; and
- Cost.

A summary of the evaluation of the proposed alternatives is provided in Table 4 and each criterion is addressed in Sections 2.6.1 through 2.6.8. The overall evaluation is then used to determine the relative benefit of each alternative.

Based upon EPI's experience, best professional judgment, and the application of accepted engineering and scientific principles, each alternative has been assigned a score for each criterion ranging from 5 (best) to 1 (worst). Each score is based on the perceived benefit associated with the criterion and is included in Table 4. Several of the criteria are comprised of sub-criteria. In such cases, each sub-criterion is scored and the average of those scores is used as the criterion score. Alternatives deemed equally beneficial for a criterion or sub-criterion are given the same score. The highest score is the preferred alternative for the non-cost criteria.

For the disproportionate cost analysis (DCA), the non-cost criteria are weighted based on factors established by Ecology and then summed. That summed score is then compared to the estimated cost of each alternative. The results of the DCA are presented in Section 2.6.9.

2.6.1 Protectiveness

Protectiveness is defined in WAC 173-340-360(3)(f)(i) as:

> *Overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, time required to reduce risk at the facility and attain cleanup standards, on-site and off-site risks resulting from implementing the alternative, and improvement of the overall environmental quality.*

All remedial alternatives are protective of human health and the environment. Two of the alternatives actively remediate soil on the Perine Property, while one alternative imposes restrictions to prevent exposures. Alternative 1 is most protective because it removes all impacted soil to the maximum extent practicable in the shortest amount of time. Alternative 2 is slightly less protective than Alternative 1 primarily because the *in situ* treatment will require more time to achieve compliance than removal and off-Site disposal. Alternative 3 is less protective than Alternatives 1 and 2 because it leaves impacted soil in place and only imposes restrictions to prevent exposures.

Alternative 1 receives an aggregate score of 5.0, Alternative 2 a score of 3.5, and Alternative 3 a score of 2.3. The individual sub-criteria scores that result in these aggregate scores are presented in Table 4.

2.6.2 Permanence

Permanence is defined in WAC 173-340-360(3)(f)(ii) as:

> *The degree to which the alternative permanently reduces the toxicity, mobility or volume of hazardous substances, including the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of waste treatment process, and the characteristics and improvement of the overall environmental quality.*

At the completion of remedial activities, Alternatives 1 and 2 will each result in a permanent solution. Alternative 3 would have a lower degree of permanence during its implementation due to contamination remaining in place for a longer time frame.

Permanence includes the sub-criteria of reduction in toxicity, degree of irreversibility, and the type and character of the waste streams generated during treatment. Alternative 1 would generate a large amount of waste soil while Alternative 2 would generate a smaller soil waste stream but would also generate hazardous waste resulting from treatment of vapor discharges during SVE system operation. Alternative 3 would generate no waste stream. While all technologies, if successfully implemented, would be permanent, the degree of certainty in the success of each technology varies due to the nature of the technologies.

Alternative 1 receives an aggregate score of 3.7, Alternative 2 a score of 3.3, and Alternative 3 a score of 2.7. The individual sub-criteria scores that result in these aggregate scores are presented in Table 4.

2.6.3 Effectiveness Over the Long Term

Effectiveness over the long term is defined in WAC 173-340-360(3)(f)(iv) as:

> *Long-term effectiveness includes the degree of certainty that the alternative will be successful, the reliability of the alternative during the period of time hazardous substances are expected to remain on-site at concentrations that exceed cleanup levels, the magnitude of residual risk with the alternative in place, and the effectiveness of controls required to manage treatment residues or remaining wastes. The following types of cleanup action components may be used as a guide, in descending order, when assessing the relative degree of long-term effectiveness: reuse or recycling; destruction or detoxification; immobilization or solidification; on-site or off-site disposal in an engineered, lined and monitored facility; on-site isolation or containment with attendant engineering controls; and institutional controls and monitoring.*

Alternatives 1 and 2 both have the intent and goal of meeting cleanup standards and protecting human health and the environment after completion of the remedial action, while Alternative 3 has the intent and goal of protecting human health and the environment during its implementation. There are varying levels of uncertainty and reliability associated with each technology throughout the process. Long-term effectiveness includes the sub-criteria of certainty, reliability, residual risk, and utilization of preferred remedies. Alternatives 1 and 2 are ranked higher for long-term effectiveness than Alternative 3 primarily due to their higher degree of certainty and general reliability associated with the technology used.

Alternative 1 receives an aggregate score of 4.3, Alternative 2 a score of 3.5, and Alternative 3 a score of 2.3. The individual sub-criteria scores that result in these aggregate scores are presented in Table 4.

2.6.4 Management of Short-Term Risks

Management of short-term risks is defined in WAC 173-340-360(3)(f)(v):

> *The risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.*

Each of the alternatives has manageable short-term risks and effective measures for mitigating those risks. Alternative 3 has been ranked the highest for this criterion because it does not involve any intrusive work and, therefore, little to no short-term risks. Alternative 1 has the highest level of short-term risk of the three alternatives due to the excavation work performed inside of two occupied buildings and potential structural issues. Alternative 2 has moderate risks associated with trenching inside the occupied buildings.

Alternative 1 receives an aggregate score of 1.5, Alternative 2 a score of 2.5, and Alternative 3 a score of 5.0. The individual sub-criteria scores that result in these aggregate scores are presented in Table 4.

2.6.5 Technical and Administrative Implementability

Technical and administrative implementability is defined in WAC 173-340-360(3)(f)(vi):

> *Ability to be implemented including consideration of whether the alternative is technically possible, availability of necessary off-site facilities, services and materials, administrative and regulatory requirements, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with existing facility operations and other current or potential remedial actions.*

This criterion includes the concepts of technical possibility, access, necessary resources, monitoring requirements, and integration into existing facility features. All alternatives are technically possible to implement, but primarily vary based on their overall complexity. Alternative 3 received the highest implementability score because it is the easiest to implement. Alternative 1 received the lowest score because it is the most complex alternative due to the level of mass excavation to be performed inside the buildings and potential access issues related to excavation on the west-adjacent property. Alternative 2 received a slightly higher score than Alternative 1, but has similar challenges and complexities due to trenching and installing piping inside the buildings and using a portion of the property for aboveground SVE equipment.

Alternative 1 receives an aggregate score of 1.7, Alternative 2 a score of 2.2, and Alternative 3 a score of 5.0. The individual sub-criteria scores that result in these aggregate scores are presented in Table 4.

2.6.6 Consideration of Public Concerns

Consideration of public concerns is defined in WAC 173-340-360(3)(f)(vii):

> *Whether the community has concerns regarding the alternative and, if so, the extent to which the alternative addresses those concerns. This process includes concerns from individuals, community groups, local governments, tribes, federal and state agencies, or any other organization that may have an interest in or knowledge of the site.*

Public concerns are expected to vary depending on the remedial action. Both Alternatives 1 and 2 would likely have concerns associated with disruption to facility operations during their implementation. Alternative 1 is expected to also have slightly higher concerns associated with the mobilization and use of heavy equipment, construction noise, the high potential for generating fugitive vapors and dust during excavation activities, and transport of impacted soil on public roadways. Public concerns associated with Alternative 2 would not be as significant as those associated with Alternative 1, but would likely include concerns regarding drilling, use of heavy equipment, noise issues, vapor discharges, and partial use of the property for aboveground equipment. Alternative 3 would not have these concerns, but would likely have concerns associated with leaving impacted soil in place.

Alternative 1 receives a direct score of 1.0, Alternative 2 a score of 2.0, and Alternative 3 a score of 4.0. These scores are presented in Table 4.

2.6.7 Restoration Time Frame

Restoration Time Frame (RTF) is evaluated using the following factors described in WAC 173-340-360(4)(b)(i through ix):

- *Potential risks posed by the site to human health and the environment*
- *Practicability of achieving a shorter restoration timeframe*
- *Current use of the site*
- *Potential future use of the site*
- *Availability of alternative water supplies*
- *Likely effectiveness and reliability of institutional controls*
- *Ability to monitor and control migration of hazardous substances from the site*
- *Toxicity of hazardous substances at the site*
- *Natural processes that reduce concentrations of hazardous substances at the site*

Estimates of RTF are necessarily subjective. Each of the alternatives is assumed to provide a reasonable RTF, but more accurate estimates of *in situ* treatment effectiveness are premature without data regarding actual treatment effectiveness and response to the method that will be used.

RTF was ranked based on the general aggressiveness of each of the remedial actions and perceived certainty associated with the action. Alternative 1 is judged to be the most aggressive based on the contaminant mass removed in the shortest period of time. Although Alternative 2 also reduces contaminant mass, the certainty associated with its successful implementation and ability to achieve cleanup standards is perceived to be lower than that of Alternative 1. Alternative 3 would have a longer RTF than the other alternatives due to leaving impacted soil in place without implementing any active remediation.

Alternative 1 receives a direct score of 5.0, Alternative 2 a score of 3.0, and Alternative 3 a score of 1.0. These scores are presented in Table 4.

2.6.8 Cost

Cost is defined in WAC 173-340-360(3)(f)(iii) as:

> *The cost to implement the alternative, including the cost of construction, the net present value of any long-term costs, and agency oversight costs that are cost recoverable. Long-term costs include operation and maintenance costs, monitoring costs, equipment replacement costs, and the cost of maintaining institutional controls. Cost estimates for treatment technologies shall describe pretreatment, analytical, labor, and waste management costs. The design life of the cleanup action shall be estimated and the cost of replacement or repair of major elements shall be included in the cost estimate.*

Order-of-magnitude remediation costs (i.e., ± 30 to 50 percent) have been estimated for each of the remedial alternatives based on the descriptions and associated assumptions presented in Section 2.4, and without engineering design or contractor bidding. The order-of-magnitude remedial costs are based

on typical costs for Washington State and the current knowledge of the Site and are summarized in the following table. These costs are for comparison purposes only and actual implementation costs will vary from those provided below. These estimated costs incorporate a variety of necessary assumptions and the validity of those assumptions cannot be fully known at this time.

Remedial Alternatives Cost Summary

Remedial Alternative	Order-of-Magnitude Remediation Cost Estimate
1. Remedial Excavation	$ 543,000
2. *In Situ* Treatment	$ 375,000
3. Institutional Controls	$ 30,000

2.6.9 Disproportionate Cost Analysis

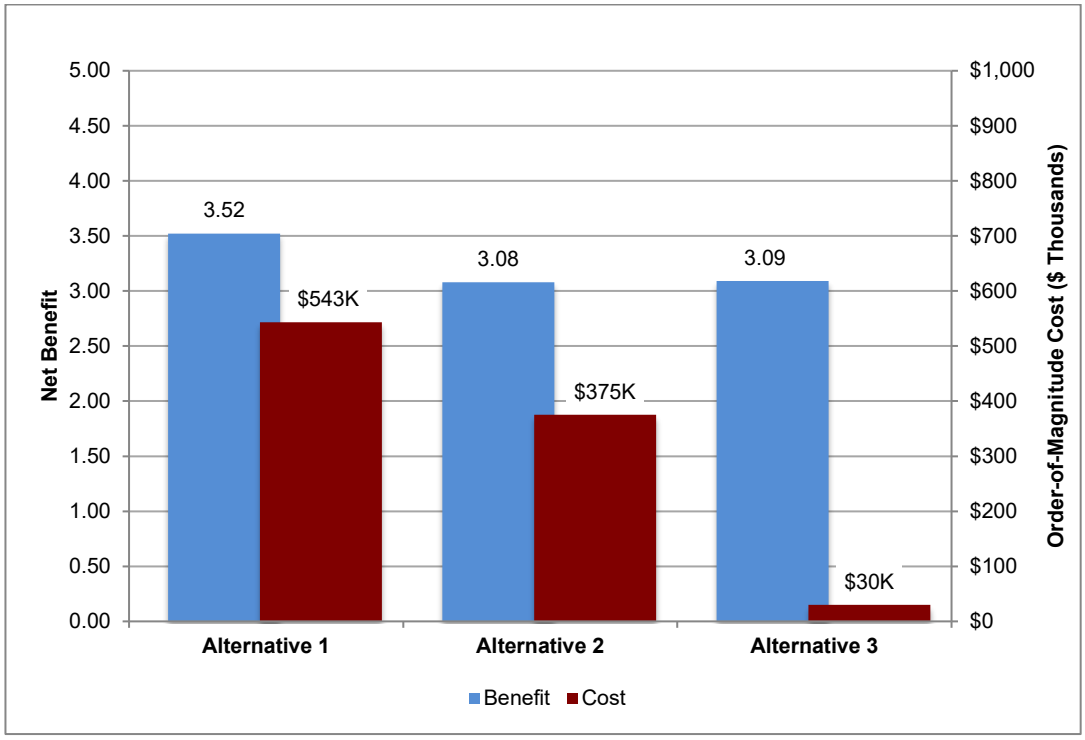
Under WAC 173-340-360(3)(e), a cleanup action shall not be considered practicable "*if the incremental cost of the alternative over that of a lower cost alternative exceeds the incremental degree of benefits achieved by the alternative over that of the other lower cost alternative*". The determination of practicability is made using an analysis of benefit versus cost. The DCA can be performed quantitatively using the judged scoring of the non-cost criteria as the net benefit.

As previously discussed, each alternative was assigned a score for each of the non-cost evaluation criteria, with a score of 5 representing the highest overall perceived benefit and a score of 1 representing the lowest overall perceived benefit. The raw scores that were assigned in Sections 2.6.1 through 2.6.6 are summarized below and are weighted for each criterion according to weighting factors established by Ecology. The sum of the individual weighted scores for each alternative represents a value of the overall benefit of the alternative. The table and chart below present the DCA using the estimated order-of-magnitude costs and quantitative net benefit values.

Remedial Alternatives Benefit Scoring Summary

Criteria *(Weighting Factor)*	Alternative 1		Alternative 2		Alternative 3	
	Rank	Value	Rank	Value	Rank	Value
Protectiveness *(0.3)*	5.0	1.50	3.5	1.05	2.3	0.69
Permanence *(0.2)*	3.7	0.74	3.3	0.66	2.7	0.54
Long-Term Effectiveness *(0.2)*	4.3	0.86	3.5	0.70	2.3	0.46
Short-Term Risk *(0.1)*	1.5	0.15	2.5	0.25	5.0	0.50
Implementability *(0.1)*	1.7	0.17	2.2	0.22	5.0	0.50
Public Concerns *(0.1)*	1.0	0.10	2.0	0.20	4.0	0.40
BENEFIT VALUE	**3.52**		**3.08**		**3.09**	

Cost-to-Benefit Analysis



2.7 Recommended Remedial Alternative

The FFS and DCA indicates that Alternative 3, Institutional Controls, best meets the MTCA criteria for selection of a remedial action at the Perine Property. This approach provides substantial benefit to the Perine Property at the lowest cost and complies with applicable regulations, is fully protective of human health and the environment, is highly practicable, and can be readily implemented at the Perine Property.

While Alternatives 1 and 2 provide a slightly greater or virtually equal level of environmental protectiveness than Alternative 3, they also result in disproportionately high costs, far in excess of the marginal increase in or similar level of protectiveness. Those alternatives also have substantial short-term risks and significant issues related to implementability and public concerns that are not components of Alternative 3.

3.0 CLEANUP ACTION PLAN

As indicated above, institutional controls in the form of a deed restriction has been selected as the preferred cleanup action for the Site (Alternative 3). To implement this action, an EC will be prepared according to the Ecology template provided in Attachment B.

The EC will address the portions of the Perine Property that are impacted with TCE at concentrations greater than the CUL. The location of the anticipated Restricted Area for the EC is indicated on Figure 7. In order to clearly delineate the Restricted Area for the EC, a land survey will be performed, and a legal

description and boundary map will be prepared by a licensed surveyor. Performance of the survey will include placement of boundary markers or reference monuments on the property to physically identify the area addressed by the EC. The legal description and map will cover the affected portion of the Perine Property.

Along with the new legal description and boundary map, the EC will also include specific restrictions to be placed on the use of the .Perine Property Land use restrictions will be determined through direct communications with the local planning authority and consultations with Ecology staff.

To ensure proper maintenance of the protective cap, an Operations and Maintenance Manual will be prepared that outlines procedures for regular inspection and maintenance activities. A Contingency Plan will also be prepared to provide procedures for implementing contingent actions if the cap materials are ever breached or deteriorate to conditions that are no longer protective. These documents will be provided as Exhibits to the EC.

Once the EC has been prepared, the property owner and persons holding other property interests such as utility easements, if applicable, will be required to provide a notarized signature on the EC. The signed EC will then be submitted to Ecology for final signature.

After the EC has been signed by all parties, it will be submitted to the King County Recorder's Office and recorded on the title of the parcel of real property subject to the EC. Proof of the recorded EC will then be sent to Ecology for their records, and copies will be provided to all signatories and stakeholder parties.

4.0 LIMITATIONS

To the extent that preparation of this FFS/CAP required the application of best professional judgment and the application of scientific principles, certain results of this work were based on subjective interpretation. EPI makes no warranties, express or implied, including and without limitation warranties as to merchantability or fitness for a particular purpose. The information provided in this FFS/CAP is not to be construed as legal advice.

5.0 REFERENCES

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Tables

Table 1
Detected Volatile Organic Compounds in Soil
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

Sample Location Identification	Sample Depth (Feet)	Date Collected	Volatile Organic Compounds[a]		
			Tetrachloro-ethene (PCE)	Trichloro-ethene (TCE)	cis-1,2-Dichloro-ethene
P04	8	3/17/2011	**0.340**	**9.10**	**0.067**
P05	3	3/17/2011	<0.025	<0.03	<0.05
P07	9	3/17/2011	<0.025	**0.10**	<0.05
MW05	8	6/30/2011	**0.15**	**4.0**	<0.05
MW07	13	6/30/2011	<0.025	<0.03	<0.05
B-32	0.5	7/24/2014	<0.01	<0.01	<0.01
	3	7/24/2014	<0.01	<0.01	<0.01
	6	7/24/2014	<0.01	**0.029**	<0.01
	9	7/24/2014	<0.01	<0.01	<0.01
	12	7/24/2014	<0.01	<0.01	<0.01
	15	7/24/2014	<0.01	<0.01	<0.01
	18	7/24/2014	<0.01	<0.01	<0.01
B-33	0.5	7/24/2014	<0.01	<0.01	<0.01
	5	7/24/2014	<0.01	**0.016**	<0.01
	12	7/24/2014	<0.01	<0.01	<0.01
B-34	0.5	7/24/2014	<0.01	**0.010**	<0.01
	5	7/24/2014	<0.01	**0.043**	<0.01
	12	7/24/2014	<0.01	**0.015**	<0.01
	13	7/24/2014	<0.01	**0.011**	<0.01
	16	7/24/2014	<0.01	<0.01	<0.01
	18	7/24/2014	<0.01	<0.01	<0.01
B-35	0.5	7/24/2014	<0.01	**0.018**	<0.01
	5	7/24/2014	<0.01	**0.041**	<0.01
	12	7/24/2014	<0.01	**0.027**	<0.01
B-36	0.5	7/24/2014	<0.01	**0.029**	<0.01
	5	7/24/2014	<0.01	**0.038**	<0.01
	12	7/24/2014	**0.013**	**0.330**	**0.015**
	13	7/24/2014	**0.013**	**0.470**	**0.019**
	16	7/24/2014	<0.01	<0.01	<0.01
	18	7/24/2014	<0.01	**0.049**	<0.01
B-37	4	7/29/2014	<0.01	<0.01	<0.01
	9	7/29/2014	<0.01	**0.020**	<0.01
B-38	0.5	7/28/2014	<0.01	<0.01	<0.01
	4	7/28/2014	<0.01	<0.01	<0.01
	9	7/28/2014	<0.01	**0.024**	<0.01
	12	7/28/2014	<0.01	**0.048**	**0.011**
	14	7/28/2014	<0.01	<0.01	<0.01
	16	7/28/2014	<0.01	<0.01	<0.01
B-39	0.5	7/29/2014	<0.01	<0.01	<0.01
B-40	0.5	7/29/2014	<0.01	<0.01	<0.01
	4	7/29/2014	**0.030**	**1.3**	<0.01
	9	7/29/2014	<0.01	**0.17**	<0.01
B-41	0.5	7/29/2014	<0.01	**0.011**	<0.01
	5	7/29/2014	<0.01	**0.20**	**0.21**
	9	7/29/2014	<0.01	**0.11**	<0.01
B-42	0.5	7/29/2014	<0.01	<0.01	<0.01
	4	7/29/2014	<0.01	**2.8**	<0.01
	9	7/29/2014	<0.01	<0.01	<0.01
B-43	1	7/25/2014	<0.01	<0.01	<0.01
	6	7/25/2014	<0.01	<0.01	<0.01
	11.5	7/25/2014	<0.01	**0.019**	<0.01
B-44	1	7/25/2014	<0.01	**0.016**	<0.01
	11.5	7/25/2014	<0.01	**5.0**	<0.01
	13	7/25/2014	<0.01	**0.049**	<0.01
	16	7/25/2014	<0.01	<0.01	<0.01
	18.5	7/25/2014	<0.01	<0.01	<0.01
B-45	1	7/25/2014	<0.01	**0.017**	<0.01
	6	7/25/2014	<0.01	**0.030**	<0.01
	11.5	7/25/2014	<0.01	**0.043**	<0.01
B-46	1	7/28/2014	<0.01	<0.01	<0.01
	6	7/28/2014	<0.01	**0.014**	<0.01
	11.5	7/28/2014	<0.01	**0.013**	<0.01
	13	7/28/2014	<0.01	<0.01	<0.01
	16	7/28/2014	<0.01	<0.01	<0.01
	18	7/28/2014	<0.01	<0.01	<0.01
B-47	1	7/28/2014	<0.01	<0.01	<0.01
	6	7/28/2014	<0.01	<0.01	<0.01
	12	7/28/2014	<0.01	<0.01	<0.01

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Sample Location Identification	Sample Depth (Feet)	Date Collected	Volatile Organic Compounds[a]		
			Tetrachloro-ethene (PCE)	Trichloro-ethene (TCE)	cis-1,2-Dichloro-ethene
B-48	0.5	3/2/2015	<0.010	<0.010	<0.010
	4.5	3/2/2015	<0.010	<0.010	<0.010
	7	3/2/2015	<0.010	<0.010	<0.010
	12	3/2/2015	<0.010	<0.010	<0.010
B-49	0.5	3/2/2015	<0.010	**0.010**	<0.010
	5	3/2/2015	<0.010	<0.010	<0.010
	8	3/2/2015	<0.010	<0.010	<0.010
	12	3/2/2015	<0.010	<0.010	<0.010
B-50	0.5	3/2/2015	<0.010	<0.010	<0.010
	5	3/2/2015	<0.010	<0.010	<0.010
	8	3/2/2015	<0.010	<0.010	<0.010
	12	3/2/2015	<0.010	<0.010	<0.010
B-51	0.5	3/2/2015	<0.010	<0.010	<0.010
	5	3/2/2015	<0.010	<0.010	<0.010
	8	3/2/2015	<0.010	<0.010	<0.010
	11	3/2/2015	<0.010	<0.010	<0.010
	14	3/2/2015	<0.010	<0.010	<0.010
	18	3/2/2015	<0.010	<0.010	<0.010
B-52	0.5	3/2/2015	<0.010	<0.010	<0.010
	5	3/2/2015	<0.010	<0.010	<0.010
	8	3/2/2015	<0.010	<0.010	<0.010
	12	3/2/2015	<0.010	<0.010	<0.010
B-53	0.5	3/2/2015	<0.010	<0.010	<0.010
	0.5 (duplicate)	3/2/2015	<0.010	<0.010	<0.010
	5	3/2/2015	<0.010	<0.010	<0.010
	8	3/2/2015	<0.010	<0.010	<0.010
	11	3/2/2015	<0.010	<0.010	<0.010
	14	3/2/2015	<0.010	<0.010	<0.010
	18	3/2/2015	<0.010	<0.010	<0.010
B-54	0.5	3/3/2015	<0.010	<0.010	<0.010
	5	3/3/2015	<0.010	<0.010	<0.010
	8	3/3/2015	<0.010	<0.010	<0.010
	8 (duplicate)	3/3/2015	<0.010	<0.010	<0.010
	12	3/3/2015	<0.010	<0.010	<0.010
B-55	0.5	3/3/2015	<0.010	<0.010	<0.010
	5	3/3/2015	<0.010	<0.010	<0.010
	8	3/3/2015	<0.010	<0.010	<0.010
	12	3/3/2015	<0.010	<0.010	<0.010
B-56	0.5	3/9/2015	<0.010	<0.010	<0.010
	4	3/9/2015	<0.010	**20**	<0.010
	9	3/9/2015	<0.010	<0.010	<0.010
B-57	0.5	3/9/2015	<0.010	<0.010	<0.010
	3	3/9/2015	<0.010	**0.30**	<0.010
	6	3/9/2015	<0.010	<0.010	<0.010
	9	3/9/2015	<0.010	**0.032**	<0.010
	15	3/9/2015	<0.010	<0.010	<0.010
	18	3/9/2015	<0.010	<0.010	<0.010
B-58	0.5	3/9/2015	<0.010	<0.010	<0.010
	5	3/9/2015	<0.010	<0.010	<0.010
	9	3/9/2015	<0.010	<0.010	<0.010
	9 (duplicate)	3/9/2015	<0.010	<0.010	<0.010
B-59	0.5	3/9/2015	<0.010	<0.010	<0.010
	5	3/9/2015	<0.010	<0.010	<0.010
	9	3/9/2015	<0.010	<0.010	<0.010
B-60	0.5	3/9/2015	<0.010	<0.010	<0.010
	4	3/9/2015	<0.010	<0.010	<0.010
	8	3/9/2015	<0.010	<0.010	<0.010
	12	3/9/2015	<0.010	<0.010	<0.010
	15	3/9/2015	<0.010	<0.010	<0.010
	18	3/9/2015	<0.010	<0.010	<0.010
	18 (duplicate)	3/9/2015	<0.010	<0.010	<0.010
B-61	5	3/9/2015	<0.010	<0.010	<0.010
	10	3/9/2015	<0.010	<0.010	<0.010
P-08	0.5	5/16/2016	<0.010	<0.010	<0.010
	4	5/16/2016	<0.010	**0.036**	<0.010
	8	5/16/2016	<0.010	<0.010	<0.010

Table 1
Detected Volatile Organic Compounds in Soil
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

Sample Location Identification	Sample Depth (Feet)	Date Collected	Volatile Organic Compounds[a]		
			Tetrachloro-ethene (PCE)	Trichloro-ethene (TCE)	cis-1,2-Dichloro-ethene
P-09	0.5	5/16/2016	<0.010	<0.010	<0.010
	4	5/16/2016	<0.010	**4.4**	<0.010
	8	5/16/2016	<0.010	<0.010	<0.010
P-10	0.5	5/16/2016	<0.010	<0.010	<0.010
	4.5	5/16/2016	<0.010	**0.044**	<0.010
	8	5/16/2016	<0.010	<0.010	<0.010
P-11	0.5	5/16/2016	<0.010	<0.010	<0.010
	4.5	5/16/2016	<0.010	**2.5**	<0.010
	8	5/16/2016	<0.010	<0.010	<0.010
MW-20 (MW-20s)	1	7/25/2014	<0.01	**0.033**	<0.01
	5	7/25/2014	<0.01	**0.038**	<0.01
	11.5	7/25/2014	<0.01	**0.044**	<0.01
Site-Specific Soil RELs Developed for the Soil-Groundwater-Indoor Air Pathway[b]			**4.4**	**0.2**	**880**
MTCA Method C Soil Cleanup Levels			**1.0[c]**	**0.05[c]**	**7,000[d]**

Notes:

All results are presented in milligrams/kilogram (mg/kg).

0.044 Bold results exceed the laboratory reporting limit.

Shaded results exceed the Site-specific remediation level.

< Indicates that the analyte is not detected at a concentration greater than the laboratory reporting limit.

-- Sample was not analyzed for this compound.

a Analyzed by EPA Method 8260.

b Site-Specific Groundwater Remediation Levels (RELs) Developed for the Soil-Groundwater-Indoor Air Pathway for a construction worker reasonable maximum exposure (RME) scenario.

c Model Toxics Control Act (MTCA) Method C CULs developed for the Soil-Groundwater-Indoor Air Pathway for a construction worker RME scenario.

d MTCA Method C CULs developed for Direct Contact (from Cleanup Levels and Risk Calculations [CLARC] spreadsheet); where CULs based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

Table 2
Detected Volatile Organic Compounds in Groundwater
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

Sample Location/ Identification	Date Collected	Tetrachloro-ethene (PCE)[a]	Trichloro-ethene (TCE)[a]	trans-1,2-Dichloro-ethene[a]	cis-1,2-Dichloro-ethene[a]	1,1-Dichloro-ethene[b]	Vinyl Chloride[a]	1,1,1-Trichloro-ethane[a]	1,1,2-Trichloro-ethane[b]	Chloro-form[a]
Reconnaissance Groundwater Samples										
P01	3/16/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	<1
P02	3/16/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	<1
P03	3/16/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	<1
P04	3/17/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	<1
P05	3/17/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	**1.2**
P06	3/16/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	**5.6**
P07	3/17/2011	<1	<1	<1	<1	<1	<0.2	<1	<1	<1
B-32W-S	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-32W-D	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-33W-S	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-34W-S	7/24/2014	<2.0	**5.7**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-34W-D	7/24/2014	<2.0	**2.3**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-35W-S	7/24/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-36W-S	7/24/2014	<2.0	**120**	<2.0	**6.5**	<2.0	<2.0	<2.0	<2.0	<2.0
B-36W-D	7/24/2014	<2.0	**77**	<2.0	**6.0**	<2.0	<2.0	<2.0	<2.0	<2.0
B-37W	7/29/2014	**2.5**	**360**	**3.0**	**34**	<2.0	<2.0	<2.0	<2.0	<2.0
B-38W-S	7/28/2014	**6.3**	**370**	<2.0	**16**	<2.0	<2.0	<2.0	<2.0	<2.0
B-38W-D	7/29/2014	<2.0	**48**	<2.0	**5.4**	<2.0	<2.0	<2.0	<2.0	<2.0
B-40W	7/29/2014	<2.0	**120**	<2.0	**2.3**	<2.0	<2.0	<2.0	<2.0	<2.0
B-41W	7/29/2014	<2.0	**40**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-42W	7/29/2014	<2.0	**18**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-43W	7/25/2014	<2.0	**140**	<2.0	**2.5**	<2.0	<2.0	<2.0	<2.0	<2.0
B-44W-S	7/25/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-44W-D	7/25/2014	<2.0	**4.9**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-45W	7/25/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-46W-S	7/28/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-46W-D	7/28/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-47W	7/28/2014	<2.0	**10**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-48:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-49:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-50:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-51:RGW	3/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-52:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-53:RGW	3/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-54:RGW	3/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-55:RGW	3/3/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-56:RGW	3/9/2015	<2.0	**20**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-57:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-58:RGW	3/9/2015	<2.0	**3.5**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-59:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-60:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
B-61:RGW	3/9/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Monitoring Well Samples										
MW-05 (MW-05s)	7/1/2011	**1.1**	**81**	<1	**1.2**	--	<0.2	--	--	--
	8/27/2014	<2.0	**110**	<2.0	**2.5**	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15	<2.0	**61**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15 Dup-2	<2.0	**66**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/17/2015	<2.0	**100**	<2.0	3.2	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15	**4.2**	**240**	<2.0	**3.6**	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	**3.1**	**210**	<2.0	**3**	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	**2.1**	**120**	<2.0	**13**	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2018	<2.0	<2.0	<2.0	**7.2**	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	**9.5**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	5/7/2019	<2.0	**3.4**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	7/30/2019	<2.0	<2.0	<2.0	**3.7**	<2.0	<0.20	<2.0	<2.0	<2.0
MW-05i	6/9/15	<2.0	**3.6**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/15	<2.0	**4.0**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	**67**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	<2.0	**2.3**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/27/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	5/7/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	7/30/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-07	7/1/2011	<1	<1	<1	<1	--	<0.2	--	--	--
	8/27/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/2015	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	**2.5**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/27/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0

Table 2
Detected Volatile Organic Compounds in Groundwater
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

Sample Location/ Identification	Date Collected	Tetrachloro-ethene (PCE)[a]	Trichloro-ethene (TCE)[a]	trans-1,2-Dichloro-ethene[a]	cis-1,2-Dichloro-ethene[a]	1,1-Dichloro-ethene[b]	Vinyl Chloride[a]	1,1,1-Trichloro-ethane[a]	1,1,2-Trichloro-ethane[b]	Chloro-form[a]
MW-20 (MW-20s)	8/27/2014	<2.0	**16**	<2.0	**55**	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15	<2.0	**54**	<2.0	**14**	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/2015	**2.3**	**160**	<2.0	**27**	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	**9.5**	**860**	**3.5**	**120**	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	**16**	**890**	<2.0	**31**	<2.0	<0.20	<2.0	<2.0	<2.0
	8/2/2016	<2.0	**2.2**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	<2.0	**5.8**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	8/2/2017	<2.0	<2.0	<2.0	**78**	<2.0	**3.9**	<2.0	<2.0	<2.0
	2/28/2018	<2.0	<2.0	<2.0	**14**	<2.0	**2.4**	<2.0	<2.0	<2.0
	2/26/2019	<2.0	**6.9**	<2.0	**13**	<2.0	**1.1**	<2.0	<2.0	<2.0
	5/7/2019	<2.0	**2.7**	<2.0	**7.8**	<2.0	**1.9**	<2.0	<2.0	<2.0
	7/30/2019	<2.0	<2.0	<2.0	**9.1**	<2.0	**2.8**	<2.0	<2.0	<2.0
MW-20i	6/9/15	<2.0	**0.74**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/15 Dup-4	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	**13**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	<2.0	**160**	<2.0	**74**	<2.0	**0.56**	<2.0	<2.0	<2.0
	2/27/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	5/7/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	7/30/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-21 (MW-21s)	8/27/2014	<2.0	**24**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/9/15	<2.0	**2.1**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/15/2015	<2.0	**17**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	**12**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	8/3/2016	<2.0	**16**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/5/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/1/17	<2.0	**7.4**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	5/16/2017	<2.0	**10**	<2.0	**2.8**	<2.0	<0.20	<2.0	<2.0	<2.0
	8/2/2017	<2.0	**13**	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	11/28/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	6/12/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	8/9/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	11/20/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	5/8/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	7/30/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-21i	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/15/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/1/17	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-22s	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/15/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/1/17	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-22i	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/15/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/15/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/1/17	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
MW-23s	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/15	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/27/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	**12**
	5/8/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	**6.7**
	7/30/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0

Table 2
Detected Volatile Organic Compounds in Groundwater
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

Sample Location/ Identification	Date Collected	Tetrachloro-ethene (PCE)[a]	Trichloro-ethene (TCE)[a]	trans-1,2-Dichloro-ethene[a]	cis-1,2-Dichloro-ethene[a]	1,1-Dichloro-ethene[b]	Vinyl Chloride[a]	1,1,1-Trichloro-ethane[a]	1,1,2-Trichloro-ethane[b]	Chloro-form[a]
MW-23i	6/9/15	<2.0	<0.40	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	9/17/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	12/2/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	3/17/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/28/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/27/2018	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	2/26/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	5/8/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
	7/29/2019	<2.0	<2.0	<2.0	<2.0	<2.0	<0.20	<2.0	<2.0	<2.0
Site-Specific Groundwater RELs Developed for the Groundwater-Indoor Air Pathway[c]		**440**	**37**	**NVE**	**NVE**	**NVE**	**30**	**52,340**	**NVE**	**NVE**
Site-Specific Groundwater CULs Developed for the Groundwater-Indoor Air Pathway[d]		**101**	**8.4**	**NVE**	**NVE**	**NVE**	**6.8**	**11,930**	**NVE**	**NVE**
Groundwater CULs Adopted from ODEQ[e]		**5,600**	**3,000**	**1,800**	**180,000**	**44,000**	**960**	**1,100,000**	**49**	**720**

Notes:

All samples were analyzed by EPA Method 8260 and results are presented in micrograms/liter (µg/L).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed theSite-specific remediation level.

< Indicates that the analyte is not detected at a concentration greater than the laboratory reporting limit.

-- Sample was not analyzed for this compound.

REL Remediation level.

NVE No cleanup value has been established for this compound.

CUL Cleanup level.

* MW-16PP collected before low-flow purging.

a Samples collected in March 1989, September 1989 and October 1989 were analyzed by EPA Metthod 8010. Samples collected in April 1999 were analyzed by EPA Methold 8260.

b Samples collected in March 1989, September 1989 and October 1989 were analyzed by EPA Metthod 8010.

c Site-Specific Groundwater RELs Developed for the Groundwater-Indoor Air Pathway for a construction worker reasonable maximum exposure (RME) scenario.

d Site-Specific Groundwater CULs Developed for the MTCA Method C Groundwater-Indoor Air CUL.

e Oregon Department of Environmental Quality (ODEQ) Risk-Based Cleanup Levels for direct contact with groundwater in an excavation for a construction worker (http://www.deq.state.or.us/lq/pubs/docs/RBDMTable.pdf).

Qualifier:

J Laboratory estimated concentration.

Table 3
Soil Gas Analytical Results
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

Sample Location Identification	Date Collected	Measured Volatile Organic Compounds[a]							
		Tetrachloro-ethene	Trichloro-ethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,1,1-Trichloro-ethane	1,1,2-Trichloro-ethane
VS-1	3/19/2013	**2,200**	**150,000**	<160	**3,100**	<160	<160	**180**	<160
	8/7/2014	**3,310**	**21,700**	**179**	**4,040**	--	<1.74	--	--
VS-2	3/19/2013	**400**	**53,000**	<60	**410**	<60	<60	**85**	<60
	8/7/2014	**1,180**	**19,000**	**59**	**1,100**	--	<0.217	--	--
VS-3	3/19/2013	<470	**970**	<470	<470	<470	<470	<470	<470
	8/7/2014	**4.83**	**42.5**	<0.0238	<0.0793	--	<0.217	--	--
VS-4	8/7/2014	**1,730**	**18,800**	**182**	**4,810**	--	**0.302**	--	--
VS-5	8/7/2014	**654**	**9,640**	**14.2**	**45**	--	<0.217	--	--
VS-6	8/7/2014	**18.6**	**2,630**	<0.0238	<0.0793	--	<0.217	--	--
VS-7	7/1/2015	**10.7**	**2.40**	<0.0793	<0.0793	<0.0793	<0.511	**1.37**	<2.73
VS-8	7/1/2015	<2.03	<1.07	<0.0793	<0.0793	<0.0793	<0.511	<1.09	<2.73
Site-Specific Sub-Slab Soil Gas Screening Level [b]		**5,833**	**293**	**NVE**	**NVE**	**NVE**	**800**	**731,000**	**NVE**
Sub-Slab Soil Gas Screening Level MTCA Method B (Carcinogen)[c]		**321**	**12.3**	**NVE**	**NVE**	**3,050[d]**	**9.33**	**76,200[d]**	**5.21**
Sub-Slab Soil Gas Screening Level MTCA Method C (Carcinogen)[c]		**3,210**	**210**	**NVE**	**NVE**	**6,670[d]**	**93.3**	**167,000[d]**	**52.1**

Notes:

All results presented in micrograms/cubic meter ($\mu g/m^3$).

Bold Bold results exceed the laboratory reporting limit.

Shaded result exceeds the applicable Site-Specific Soil Gas Screeing Level.

< Indicates the analyte was not detected at a concentration greater than the laboratory reporting limit.

-- Sample was not analyzed for this compound.

a Volatile Organic Compounds analysis in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999.

b Site-Specific Soil Gas screening level developed for the Groundwater-Indoor Air Pathway for a construction worker reasonable maximum exposure (RME) scenario.

c Soil gas screening levels for soil gas "*just beneath a building*" from Vapor Intrusion Table, updated April 6, 2015, provided by Ecology.

d Noncarcinogen value.

Table 4
Remedial Alternatives Evaluation
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

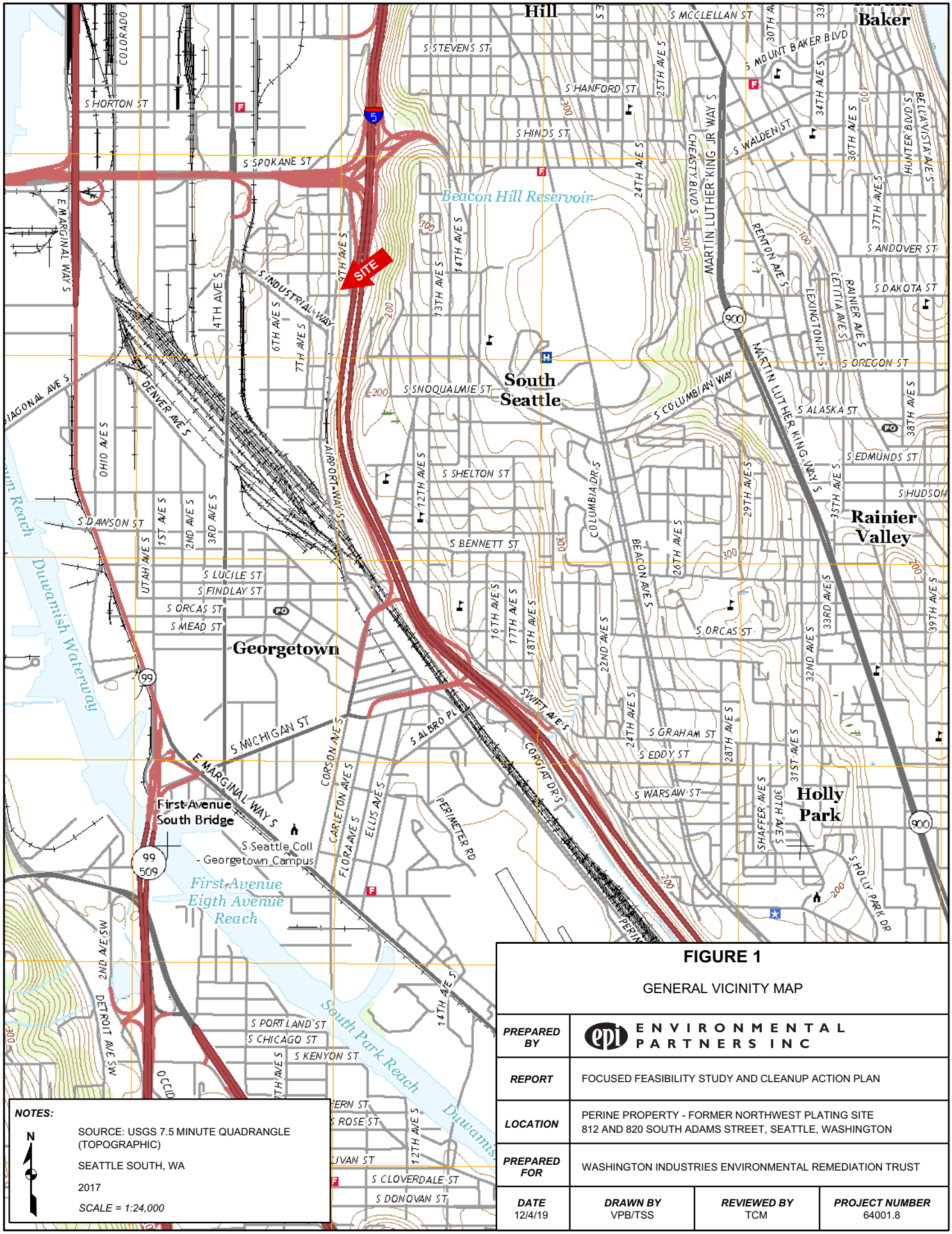
	Alternative 1		Alternative 2		Alternative 3	
Criteria	**Remedial Excavation**	***Score*** [a]	***In Situ* Treatment**	***Score*** [a]	**Institutional Controls**	***Score*** [a]
Description/Issues	Excavate all impacted soil on the Perine Property that exceeds the cleanup level and transport to an off-Site facility for disposal. Soil containing TCE less than 10 milligrams per kilogram (mg/kg) to be disposed as non-hazardous under a "contained-in determination" from Ecology. Soil containing TCE at 10 mg/kg or greater to be disposed as hazardous waste. Technically complex and challenging due to majority of excavation within occupied building.		Apply soil vapor extraction (SVE) technology to remove and reduce soil contaminant concentratons. Soil remediation effectiveness limited to SVE radius of influence. Technically complex due to trenching and piping installations within occupied building.		Implement institutional controls to place a deed restriction on the impacted property. This would not require any intrusive work at the Perine Property.	
Protectiveness	Overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, time required to reduce risk at the facility and attain cleanup standards, on-Site and off-Site risks resulting from implementing the alternative, and improvement of the overall environmental quality.					
Overall protectiveness	*Protective when complete*	*5*	*Protective when complete*	*4*	*Protective if maintained*	*3*
Reduces existing risks	*Reduces risks when implemented*	*5*	*Reduces risks when implemented*	*4*	*Reduces risks when implemented*	*3*
Time required to reduce risk	*Shortest duration to reduce risks*	*5*	*Moderate duration to reduce risks*	*3*	*Longer duration to reduce risks*	*2*
On-Site risks	*Reduces risks with high level of certainty*	*5*	*Reduces risks with moderate to high level of certainty*	*3*	*Reduces risks with lower level of certainty*	*2*
Off-Site risks	*Reduces risks with high level of certainty*	*5*	*Reduces risks with moderate to high level of certainty*	*3*	*Reduces risks with lower level of certainty*	*2*
Improvement in environmental quality	*High level of improvement*	*5*	*High level of improvement*	*4*	*No immediate change in environmental quality*	*2*
Criterion Score		***5.0***		***3.5***		***2.3***
Permanence	The degree to which the alternative permanently reduces the toxicity, mobility or volume of hazardous substances, including the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of waste treatment process, and the characteristics and improvement of the overall environmental quality.					
Reduces toxicity, mobility, and volume	*Reduces toxicity, mobility, and volume rapidly*	*5*	*Reduces toxicity, mobility and volume moderately*	*4*	*Reduces toxicity, mobility, and volume slowly*	*2*
Degree of irreversibility	*Irreversible*	*5*	*Irreversible*	*4*	*Low degree of irreversibility*	*1*
Waste characteristics	*Generates high soil waste stream*	*1*	*Generates soil waste stream during installation and air waste when implemented, including hazardous disposal of spent carbon*	*2*	*No waste stream generated*	*5*
Criterion Score		***3.7***		***3.3***		***2.7***
Long-Term Effectiveness	Long-term effectiveness includes the degree of certainty that the alternative will be successful, the reliability of the alternative during the period of time hazardous substances are expected to remain on-site at concentrations that exceed cleanup levels, the magnitude of residual risk with the alternative in place, and the effectiveness of controls required to manage treatment residues or remaining wastes. The following types of cleanup action components may be used as a guide, in descending order, when assessing the relative degree of long-term effectiveness: Reuse or recycling; destruction or detoxification; immobilization or solidification; on-site or off-site disposal in an engineered, lined and monitored facility; on-site isolation or containment with attendant engineering controls; and institutional controls and monitoring.					
Degree of Certainty	*Highly certain*	*5*	*Moderately to highly certain*	*4*	*Moderately certain*	*3*
Reliability	*Highly reliable*	*5*	*Moderately to highly reliable*	*4*	*Moderately reliable*	*3*
Residual Risk	*Low*	*5*	*Low to Moderate*	*3*	*Moderate to high*	*2*
Technology hierarchy	*Low rank due to off-Site soil disposal*	*2*	*Moderate to high*	*3*	*Low*	*1*
Criterion Score		***4.3***		***3.5***		***2.3***

Table 4
Remedial Alternatives Evaluation
Focused Feasibility Study and Cleanup Action Plan
Perine Property
812 and 820 South Adams Street, Seattle, WA

	Alternative 1		Alternative 2		Alternative 3	
Criteria	**Remedial Excavation**	***Score*** [a]	***In Situ* Treatment**	***Score*** [a]	**Institutional Controls**	***Score*** [a]
Description/Issues	Excavate all impacted soil on the Perine Property that exceeds the cleanup level and transport to an off-Site facility for disposal. Soil containing TCE less than 10 milligrams per kilogram (mg/kg) to be disposed as non-hazardous under a "contained-in determination" from Ecology. Soil containing TCE at 10 mg/kg or greater to be disposed as hazardous waste. Technically complex and challenging due to majority of excavation within occupied building.		Apply soil vapor extraction (SVE) technology to remove and reduce soil contaminant concentratons. Soil remediation effectiveness limited to SVE radius of influence. Technically complex due to trenching and piping installations within occupied building.		Implement institutional controls to place a deed restriction on the impacted property. This would not require any intrusive work at the Perine Property.	
Short-Term Risk Management	The risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.					
During construction and implementation	*High risks associated with excavation inside buildings and potential structural issues*	*1*	*Moderate to high risks associated with trenching inside building*	*2*	*Low risks*	*5*
Effectiveness of risk management	*Moderately effective*	*2*	*Moderately effective*	*3*	*Very effective*	*5*
Criterion Score		***1.5***		***2.5***		***5.0***
Implementability	Ability to be implemented including consideration of whether the alternative is technically possible, availability of necessary off-site facilities, services and materials, administrative and regulatory requirements, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with existing facility operations and other current or potential remedial actions.					
Technically possible	*Possible, but with high complexity associated with mass excavation inside occupied buildings and excavating beneath rail spur on west-adjacent property.*	*1*	*Possible based on data for existing SVE systems on neighboring property, but with some complexity due to trenching inside occupied buildings.*	*3*	*Possible for subject property.*	*5*
Access	*Access for equipment to impacted areas inside buildings may be challenging due to facility operations; potential for access denial from BNSF to work on west-adjacent property.*	*1*	*Access for equipment to impacted areas inside buildings may be challenging due to facility operations.*	*2*	*No access issues related to implementing deed restrictions.*	*5*
Availability of necessary resources	*Readily available*	*2*	*Readily available*	*3*	*Readily available*	*5*
Scheduling, size, and complexity	*High complexity and size due to level of work inside occupied buildings; excavation, disposal, and site restoration can be completed in 4 to 6 weeks.*	*2*	*Moderate complexity and size; SVE installation and startup can be completed within 4 to 6 weeks; SVE operation may require an air discharge permit; soil sampling required following completion of system operation to confirm compliance.*	*2*	*Very low complexity; environmental covenant can be prepared within 2 to 3 weeks.*	*5*
Monitoring requirements	*Low to moderate*	*3*	*High*	*1*	*Low*	*5*
Integration with existing features	*Low due to disruption of facility operations*	*1*	*Moderate. Will require a small portion of the property for installation of aboveground equipment.*	*2*	*High*	*5*
Criterion Score		***1.7***		***2.2***		***5.0***
Public Concerns	Whether the community has concerns regarding the alternative and, if so, the extent to which the alternative addresses those concerns. This process includes concerns from individuals, community groups, local governments, tribes, federal and state agencies, or any other organization that may have an interest in or knowledge of the Site.					
Concerns	*Potential concerns regarding disruption to facility operations, use of heavy equipment, dust generation, noise issues, and transport of impacted soil on public roadways.*	***1.0***	*Potential concerns regarding disruption to facility operations, drilling, use of heavy equipment, dust generation, noise issues, vapor discharges, and partial use of the property for placement of system equipment.*	***2.0***	*Potential concerns regarding impacts remaining in soil.*	***4.0***
Restoration Time Frame	Determination of whether a cleanup action provides for a reasonable restoration time frame based on criteria in WAC 173-340-360(4)(b).					
Time Frame	*Shortest time frame*	***5.0***	*Moderate to shorter time frame*	***3.0***	*Moderate to longer time frame*	***1.0***
TOTAL SCORE	*22.1*		*20.0*		*22.3*	
Conceptual Level Cost	$543,000		$375,000		$30,000	

Note:
a Each sub-criterion is scored from 5 (best) to 1 (worst) based on the perceived benefit; the total criterion score is the average of the associated sub-criterion scores.

Figures



NOTES:

N

SOURCE: USGS 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC)

SEATTLE SOUTH, WA

2017

SCALE = 1:24,000

FIGURE 1

GENERAL VICINITY MAP

PREPARED BY	epi ENVIRONMENTAL PARTNERS INC		
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN		
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON		
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST		
DATE 12/4/19	***DRAWN BY*** VPB/TSS	***REVIEWED BY*** TCM	***PROJECT NUMBER*** 64001.8

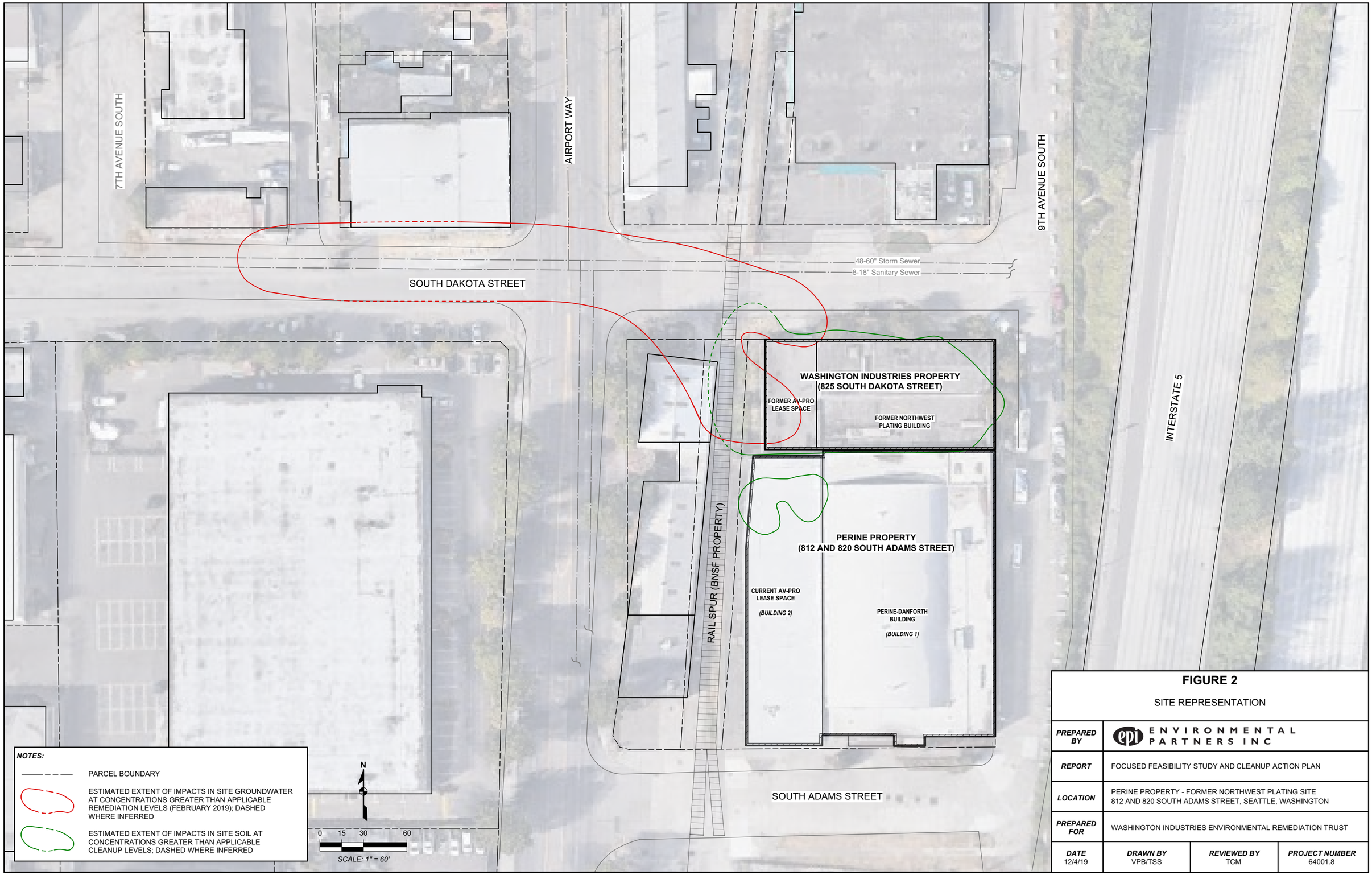
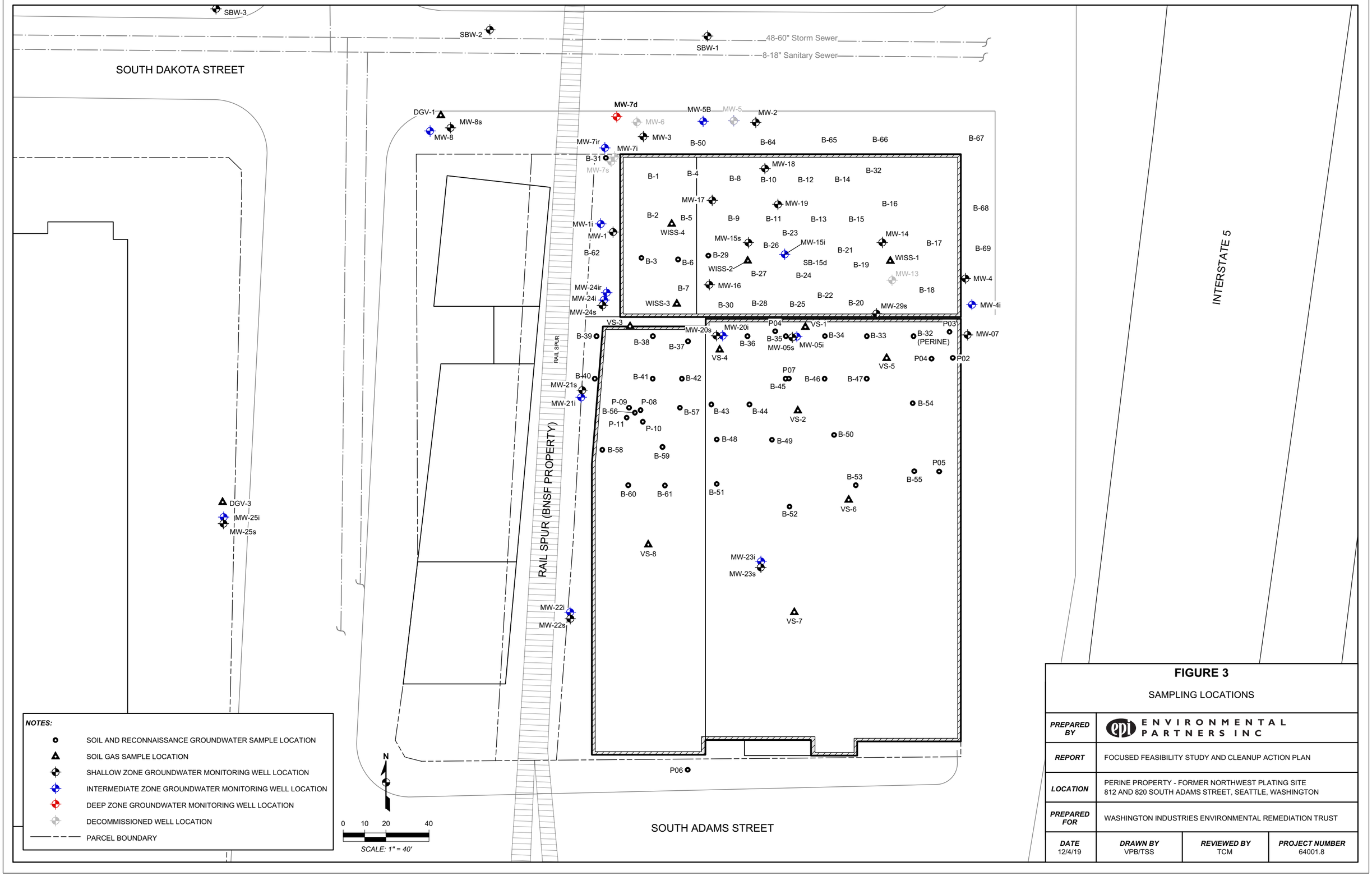


FIGURE 2

SITE REPRESENTATION

PREPARED BY	ENVIRONMENTAL PARTNERS INC
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST

DATE	***DRAWN BY***	***REVIEWED BY***	***PROJECT NUMBER***
12/4/19	VPB/TSS	TCM	64001.8



NOTES:

- SOIL AND RECONNAISSANCE GROUNDWATER SAMPLE LOCATION
- SOIL GAS SAMPLE LOCATION
- SHALLOW ZONE GROUNDWATER MONITORING WELL LOCATION
- INTERMEDIATE ZONE GROUNDWATER MONITORING WELL LOCATION
- DEEP ZONE GROUNDWATER MONITORING WELL LOCATION
- DECOMMISSIONED WELL LOCATION
- PARCEL BOUNDARY

FIGURE 3

SAMPLING LOCATIONS

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN		
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON		
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST		
DATE 12/4/19	**DRAWN BY** VPB/TSS	**REVIEWED BY** TCM	**PROJECT NUMBER** 64001.8

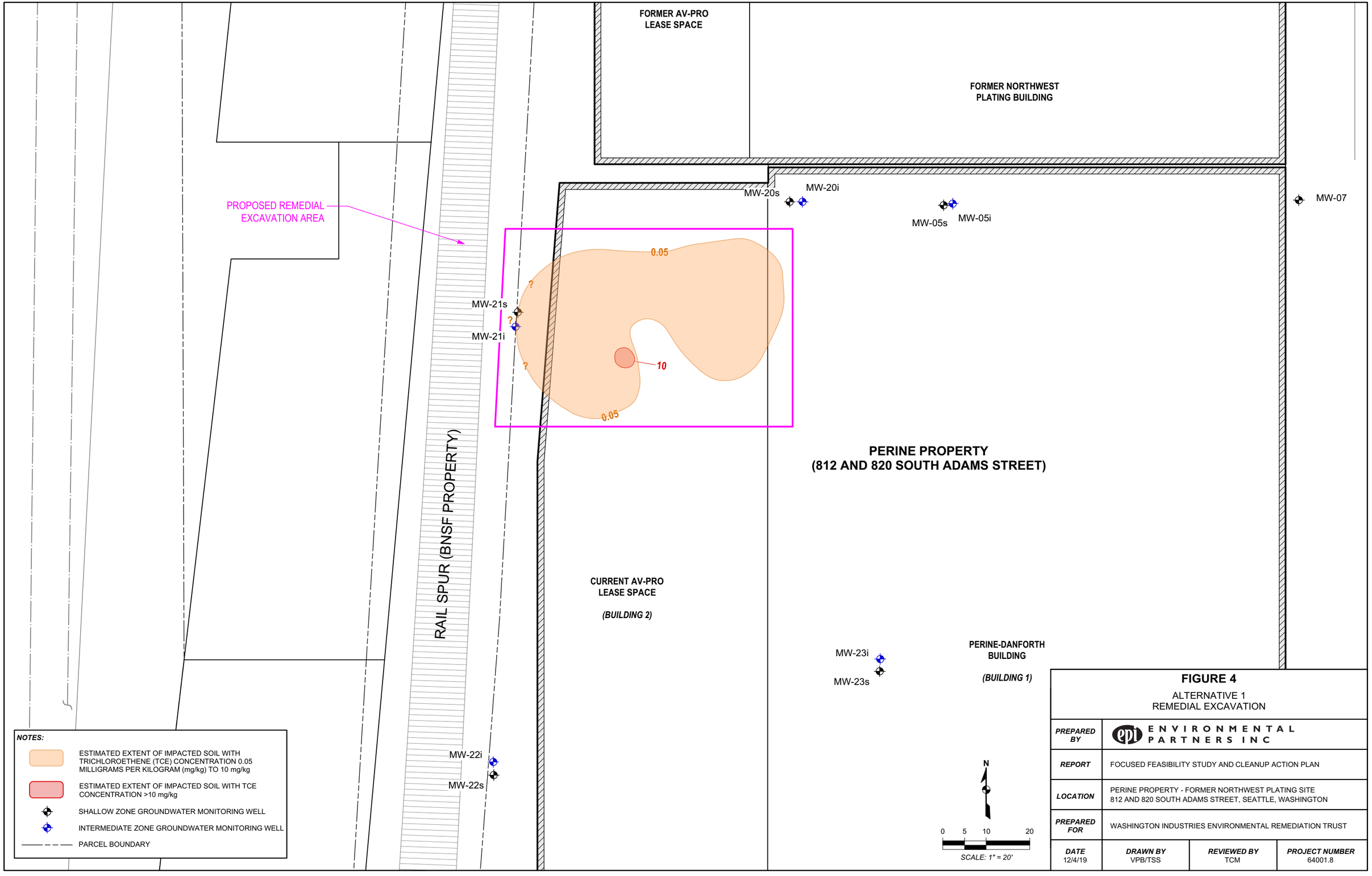


FIGURE 4

ALTERNATIVE 1
REMEDIAL EXCAVATION

PREPARED BY	epi ENVIRONMENTAL PARTNERS INC		
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN		
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON		
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST		
DATE 12/4/19	***DRAWN BY*** VPB/TSS	***REVIEWED BY*** TCM	***PROJECT NUMBER*** 64001.8

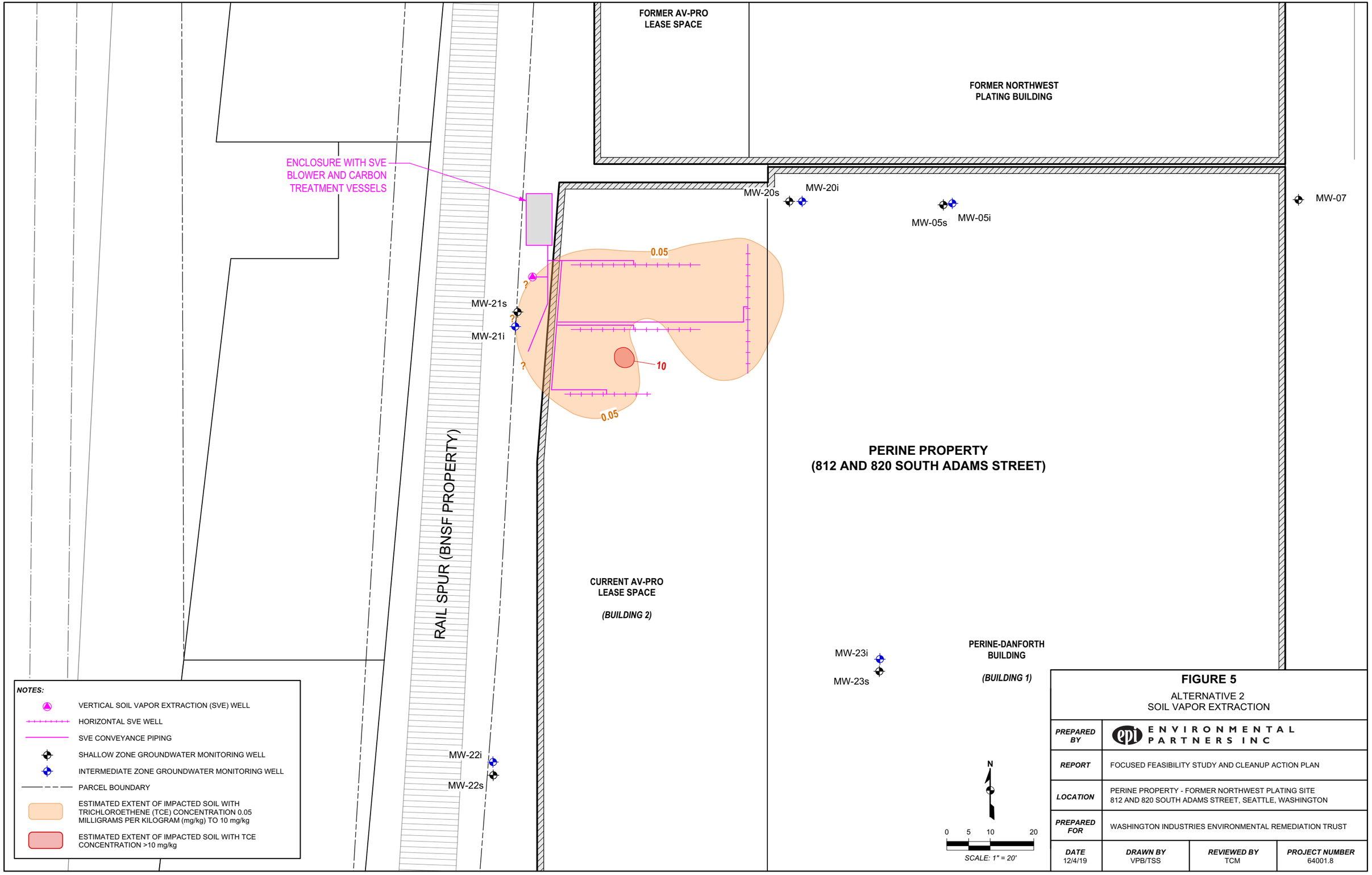
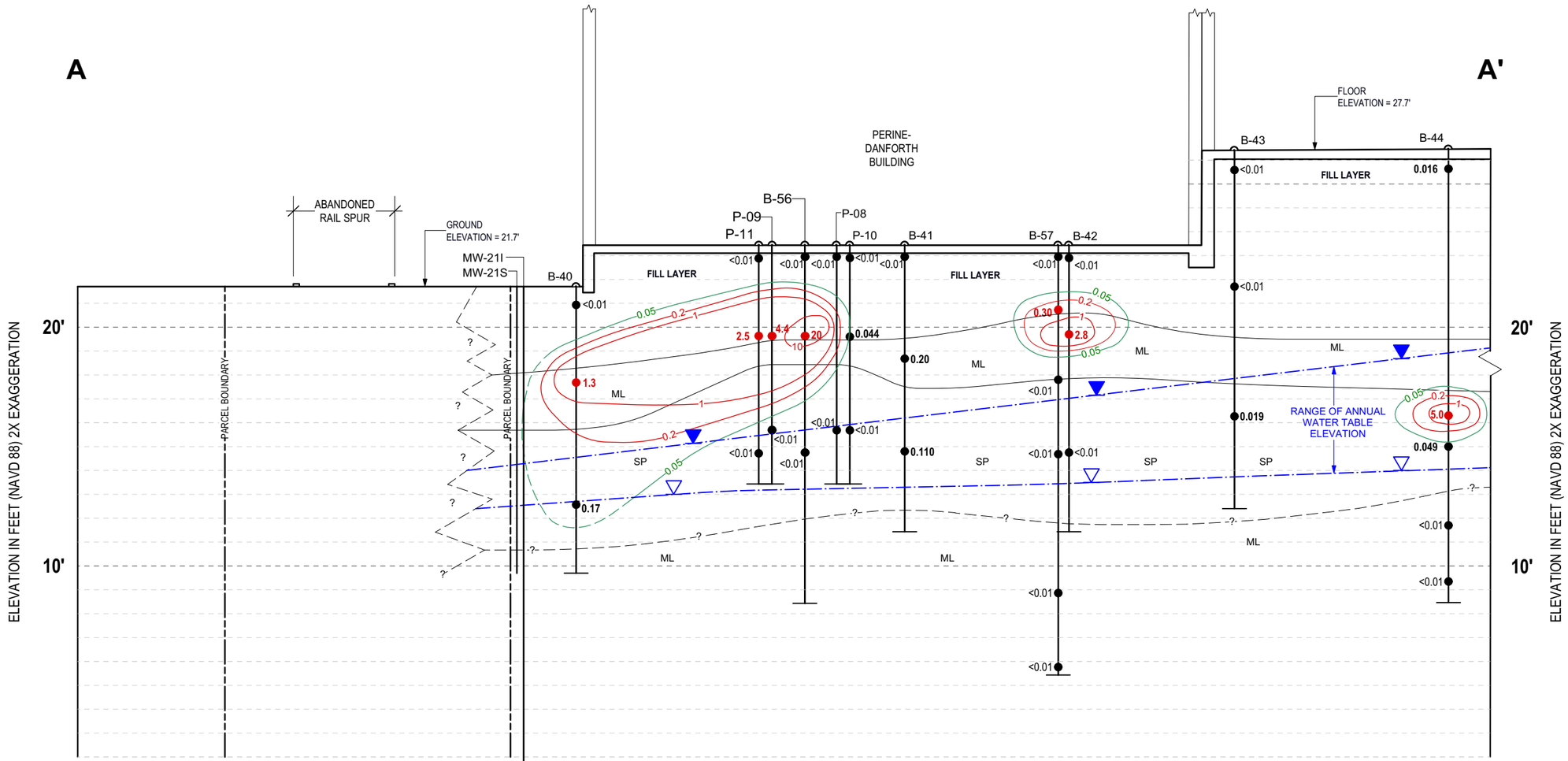


FIGURE 5

ALTERNATIVE 2
SOIL VAPOR EXTRACTION

PREPARED BY	EPI ENVIRONMENTAL PARTNERS INC		
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN		
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON		
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST		
DATE 12/4/19	*DRAWN BY* VPB/TSS	*REVIEWED BY* TCM	*PROJECT NUMBER* 64001.8



NOTES:

SOIL BORING LOCATION

SURFACE LEVEL

0.010 SOIL SAMPLE LOCATION WITH TRICHLOROETHENE (TCE) CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)

1.3 SOIL SAMPLE LOCATION WITH TCE CONCENTRATION (IN mg/kg) IN EXCEEDANCE OF SITE-SPECIFIC REMEDIATION LEVEL (REL)

SP / ? / ML GENERALIZED LITHOLOGY, CONTACTS AND DESCRIPTIONS (DASHED AND QUERIED WHERE INFERRED)

TOTAL DEPTH OF BORING

SP POORLY GRADED SAND

ML SILT

0.2 EXTENT OF TCE CONTAMINATION (WITH ISOCONTOUR VALUE IN mg/kg) EXCEEDING THE REL. DASHED WHERE INFERRED. GREEN = CLEANUP LEVEL, RED = REL

PARCEL BOUNDARY

APPROXIMATE AVERAGE HIGH GROUNDWATER ELEVATION

APPROXIMATE AVERAGE LOW GROUNDWATER ELEVATION

BOLD RED TCE VALUE INDICATES CONCENTRATION EXCEEDS THE SITE-SPECIFIC REMEDIATION LEVEL (REL)

BOLD BLACK TCE VALUE INDICATES CONCENTRATION EXCEEDS LABORATORY REPORTING LIMITS

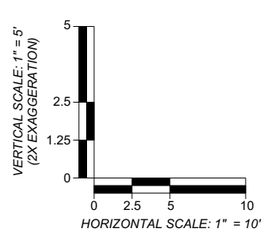


FIGURE 6

CROSS-SECTION A-A'

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN		
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON		
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST		
DATE 12/17/19	***DRAWN BY*** VPB	***REVIEWED BY*** SPT	***PROJECT NUMBER*** 64001.8

SOUTH DAKOTA STREET

SBW-3
SBW-2
SBW-1
48-60" Storm Sewer
8-18" Sanitary Sewer

MW-7d
MW-5B
MW-5
MW-2
MW-6
MW-8s
MW-8
MW-3
MW-7ir
MW-7i
MW-7s
B-31
B-50
B-64
B-65
B-66
B-67
B-1
B-4
B-8
B-10
B-12
B-14
MW-18
B-32
MW-17
MW-19
B-16
B-68
B-2
B-5
B-9
B-11
B-13
B-15
MW-1i
MW-1
B-62
MW-15s
B-23
B-26
MW-15i
MW-14
B-17
B-69
B-3
B-6
B-29
SB-15d
B-21
B-19
B-27
B-24
MW-13
MW-4
B-7
MW-16
B-18
MW-24ir
MW-24i
MW-24s
B-30
B-28
B-25
B-22
B-20
MW-29s
MW-4i
P04
P03
MW-20s
MW-20i
B-39
B-38
B-37
B-36
B-35
MW-05s
MW-05i
B-34
B-33
B-32 (PERINE)
MW-07
P04
P02
A
A'
P07
B-40
B-41
B-42
B-45
B-46
B-47
MW-21s
MW-21i
P-09
P-08
B-56
B-57
B-43
B-44
B-54
P-11
P-10
B-48
B-49
B-50
B-58
B-59
P05
B-53
B-55
B-60
B-61
B-51
B-52
MW-23i
MW-23s
MW-22i
MW-22s
P06
MW-25i
MW-25s

RAIL SPUR (BNSF PROPERTY)

INTERSTATE 5

SOUTH ADAMS STREET

N

0 10 20 40

SCALE: 1" = 40'

NOTES:

A A' GEOLOGIC CROSS-SECTION LOCATION

PROPOSED RESTRICTED AREA

SOIL AND RECONNAISSANCE GROUNDWATER SAMPLE LOCATION

SHALLOW ZONE GROUNDWATER MONITORING WELL LOCATION

INTERMEDIATE ZONE GROUNDWATER MONITORING WELL LOCATION

DEEP ZONE GROUNDWATER MONITORING WELL LOCATION

PARCEL BOUNDARY

FIGURE 7

PROPOSED RESTRICTED AREA

PREPARED BY	epi ENVIRONMENTAL PARTNERS INC		
REPORT	FOCUSED FEASIBILITY STUDY AND CLEANUP ACTION PLAN		
LOCATION	PERINE PROPERTY - FORMER NORTHWEST PLATING SITE 812 AND 820 SOUTH ADAMS STREET, SEATTLE, WASHINGTON		
PREPARED FOR	WASHINGTON INDUSTRIES ENVIRONMENTAL REMEDIATION TRUST		
DATE 12/4/19	***DRAWN BY*** VPB/TSS	***REVIEWED BY*** TCM	***PROJECT NUMBER*** 64001.8

Attachment A
Laboratory Analytical Report for Groundwater, July 2019

August 6, 2019

Mr. Sean Trimble
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

Dear Mr. Trimble,

On July 30th, 23 samples were received by our laboratory and assigned our laboratory project number EV19070213. The project was identified as your 64001. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-01
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/29/2019 12:30:00 PM
CLIENT SAMPLE ID	MW-23i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/31/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/31/2019	DLC

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ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-01
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/29/2019 12:30:00 PM
CLIENT SAMPLE ID	MW-23i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/31/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	07/31/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**103**	07/31/2019	DLC
Toluene-d8	EPA-8260	**100**	07/31/2019	DLC
4-Bromofluorobenzene	EPA-8260	**108**	07/31/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-02
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 7:15:00 AM
CLIENT SAMPLE ID	SBW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/31/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/31/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-02
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 7:15:00 AM
CLIENT SAMPLE ID	SBW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/31/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	07/31/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	07/31/2019	DLC
Toluene-d8	EPA-8260	**101**	07/31/2019	DLC
4-Bromofluorobenzene	EPA-8260	**107**	07/31/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-03
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 7:25:00 AM
CLIENT SAMPLE ID	MW-11	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/31/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**24**	2.0	1	UG/L	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichloroethene	EPA-8260	**2.8**	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/31/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-03
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 7:25:00 AM
CLIENT SAMPLE ID	MW-11	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/31/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Chromium (VI)	EPA-7196	**27**	10	1	UG/L	07/30/2019	SMH

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	07/31/2019	DLC
Toluene-d8	EPA-8260	**102**	07/31/2019	DLC
4-Bromofluorobenzene	EPA-8260	**107**	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-04
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 7:45:00 AM
CLIENT SAMPLE ID	MW-26s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Chloride	EPA-8260	**5.0**	0.20	1	UG/L	07/31/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**20**	2.0	1	UG/L	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/31/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-04
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 7:45:00 AM
CLIENT SAMPLE ID	MW-26s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/31/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	07/31/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	07/31/2019	DLC
Toluene-d8	EPA-8260	**109**	07/31/2019	DLC
4-Bromofluorobenzene	EPA-8260	**103**	07/31/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-05
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:00:00 AM
CLIENT SAMPLE ID	SBW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/31/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**2.6**	2.0	1	UG/L	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichloroethene	EPA-8260	**29**	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/31/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-05
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:00:00 AM
CLIENT SAMPLE ID	SBW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/31/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Chromium (VI)	EPA-7196	**120**	10	1	UG/L	07/30/2019	SMH

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**99.2**	07/31/2019	DLC
Toluene-d8	EPA-8260	**106**	07/31/2019	DLC
4-Bromofluorobenzene	EPA-8260	**105**	07/31/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-06
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:40:00 AM
CLIENT SAMPLE ID	SBW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/31/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trichloroethene	EPA-8260	**3.8**	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/31/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-06
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:40:00 AM
CLIENT SAMPLE ID	SBW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/31/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	07/31/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**100**	07/31/2019	DLC
Toluene-d8	EPA-8260	**102**	07/31/2019	DLC
4-Bromofluorobenzene	EPA-8260	**103**	07/31/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-07
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:46:00 AM
CLIENT SAMPLE ID	SBW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**8.5**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	**17**	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**33**	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-07
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:46:00 AM
CLIENT SAMPLE ID	SBW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Chromium (VI)	EPA-7196	U	10	1	UG/L	07/30/2019	SMH

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/01/2019	DLC
Toluene-d8	EPA-8260	**102**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**101**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-08
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:55:00 AM
CLIENT SAMPLE ID	MW-8s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**5.3**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	**3.1**	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**2.9**	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-08
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 8:55:00 AM
CLIENT SAMPLE ID	MW-8s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**103**	08/01/2019	DLC
Toluene-d8	EPA-8260	**106**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**104**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-09
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019
CLIENT SAMPLE ID	DUP-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**5.4**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	**3.1**	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**3.1**	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-09
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019
CLIENT SAMPLE ID	DUP-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	08/01/2019	DLC
Toluene-d8	EPA-8260	**102**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**100**	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-10
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 9:45:00 AM
CLIENT SAMPLE ID	MW-20s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**2.8**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**9.1**	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-10
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 9:45:00 AM
CLIENT SAMPLE ID	MW-20s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	08/01/2019	DLC
Toluene-d8	EPA-8260	**100**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**96.8**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-11
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 10:05:00 AM
CLIENT SAMPLE ID	MW-20i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-11
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 10:05:00 AM
CLIENT SAMPLE ID	MW-20i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**104**	08/01/2019	DLC
Toluene-d8	EPA-8260	**97.8**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**97.6**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-12
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 10:54:00 AM
CLIENT SAMPLE ID	MW-05i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-12
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 10:54:00 AM
CLIENT SAMPLE ID	MW-05i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	08/01/2019	DLC
Toluene-d8	EPA-8260	**101**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**95.7**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-13
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 11:20:00 AM
CLIENT SAMPLE ID	MW-05s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**3.7**	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-13
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 11:20:00 AM
CLIENT SAMPLE ID	MW-05s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	08/01/2019	DLC
Toluene-d8	EPA-8260	**101**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**96.1**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-14
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 11:30:00 AM
CLIENT SAMPLE ID	MW-23s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-14
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 11:30:00 AM
CLIENT SAMPLE ID	MW-23s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/01/2019	DLC
Toluene-d8	EPA-8260	**100**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**95.8**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-15
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:20:00 PM
CLIENT SAMPLE ID	MW-21s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-15
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:20:00 PM
CLIENT SAMPLE ID	MW-21s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/01/2019	DLC
Toluene-d8	EPA-8260	**99.8**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**97.1**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-16
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:25:00 PM
CLIENT SAMPLE ID	MW-7ir	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**0.55**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-16
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:25:00 PM
CLIENT SAMPLE ID	MW-7ir	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/01/2019	DLC
Toluene-d8	EPA-8260	**100**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**101**	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-17
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:30:00 PM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**4.4**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**34**	2.0	1	UG/L	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	**3.2**	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-17
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:30:00 PM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**100**	08/01/2019	DLC
Toluene-d8	EPA-8260	**104**	08/01/2019	DLC
4-Bromofluorobenzene	EPA-8260	**99.3**	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS JOB#:	EV19070213
		ALS SAMPLE#:	EV19070213-18
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:40:00 PM
CLIENT SAMPLE ID	MW-7s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Vinyl Chloride	EPA-8260	**6.1**	0.20	1	UG/L	08/01/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	**120**	20	10	UG/L	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trichloroethene	EPA-8260	**2.6**	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-18
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:40:00 PM
CLIENT SAMPLE ID	MW-7s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/01/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/01/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/01/2019	DLC
1,2-Dichloroethane-d4 10X Dilution	EPA-8260	**103**	08/02/2019	DLC
Toluene-d8	EPA-8260	**101**	08/01/2019	DLC
Toluene-d8 10X Dilution	EPA-8260	**104**	08/02/2019	DLC
4-Bromofluorobenzene	EPA-8260	**102**	08/01/2019	DLC
4-Bromofluorobenzene 10X Dilution	EPA-8260	**104**	08/02/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-19
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:50:00 PM
CLIENT SAMPLE ID	MW-29s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/02/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/02/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/02/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/02/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-19
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:50:00 PM
CLIENT SAMPLE ID	MW-29s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/02/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/02/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/02/2019	DLC
Toluene-d8	EPA-8260	**101**	08/02/2019	DLC
4-Bromofluorobenzene	EPA-8260	**102**	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-20
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:57:00 PM
CLIENT SAMPLE ID	MW-15i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Chloride	EPA-8260	**1.9**	0.20	1	UG/L	08/02/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/02/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/02/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/02/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-20
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 12:57:00 PM
CLIENT SAMPLE ID	MW-15i	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/02/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/02/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/02/2019	DLC
Toluene-d8	EPA-8260	**98.6**	08/02/2019	DLC
4-Bromofluorobenzene	EPA-8260	**103**	08/02/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-21
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 1:04:00 PM
CLIENT SAMPLE ID	MW-14	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/02/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/02/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/02/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/02/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-21
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 1:04:00 PM
CLIENT SAMPLE ID	MW-14	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/02/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/02/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/02/2019	DLC
Toluene-d8	EPA-8260	**99.5**	08/02/2019	DLC
4-Bromofluorobenzene	EPA-8260	**102**	08/02/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-22
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019
CLIENT SAMPLE ID	DUP-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/02/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/02/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/02/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/02/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-22
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019
CLIENT SAMPLE ID	DUP-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/02/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/02/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/02/2019	DLC
Toluene-d8	EPA-8260	**97.0**	08/02/2019	DLC
4-Bromofluorobenzene	EPA-8260	**104**	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-23
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 1:15:00 PM
CLIENT SAMPLE ID	MW-15s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Chloride	EPA-8260	**4.3**	0.20	1	UG/L	08/02/2019	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/02/2019	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/02/2019	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/02/2019	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS JOB#: ALS SAMPLE#:	8/6/2019 EV19070213 EV19070213-23
CLIENT CONTACT:	Sean Trimble	DATE RECEIVED:	07/30/2019
CLIENT PROJECT:	64001	COLLECTION DATE:	7/30/2019 1:15:00 PM
CLIENT SAMPLE ID	MW-15s	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/02/2019	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/02/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/02/2019	DLC
Vinyl Acetate	EPA-8260	U	10	1	UG/L	08/02/2019	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/02/2019	DLC
Toluene-d8	EPA-8260	**105**	08/02/2019	DLC
4-Bromofluorobenzene	EPA-8260	**103**	08/02/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

CLIENT CONTACT: Sean Trimble
CLIENT PROJECT: 64001

DATE: 8/6/2019
ALS SDG#: EV19070213
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-073119W - Batch 143714 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Chloromethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Vinyl Chloride	EPA-8260	U	UG/L	0.20	07/31/2019	DLC
Bromomethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Chloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Carbon Tetrachloride	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Trichlorofluoromethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Carbon Disulfide	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Acetone	EPA-8260	U	UG/L	25	07/31/2019	DLC
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Methylene Chloride	EPA-8260	U	UG/L	5.0	07/31/2019	DLC
Acrylonitrile	EPA-8260	U	UG/L	10	07/31/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,1-Dichloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
2-Butanone	EPA-8260	U	UG/L	10	07/31/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
2,2-Dichloropropane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Bromochloromethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Chloroform	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,1-Dichloropropene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2-Dichloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Benzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Trichloroethene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2-Dichloropropane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Dibromomethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Bromodichloromethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	UG/L	10	07/31/2019	DLC
Toluene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
2-Hexanone	EPA-8260	U	UG/L	10	07/31/2019	DLC
1,3-Dichloropropane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Tetrachloroethylene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Dibromochloromethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2-Dibromoethane	EPA-8260	U	UG/L	0.010	07/31/2019	DLC
Chlorobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

CLIENT CONTACT: Sean Trimble
CLIENT PROJECT: 64001

DATE: 8/6/2019
ALS SDG#: EV19070213
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-073119W - Batch 143714 - Water by EPA-8260

1,1,1,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Ethylbenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
m,p-Xylene	EPA-8260	U	UG/L	4.0	07/31/2019	DLC
Styrene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
o-Xylene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Bromoform	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Isopropylbenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Bromobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
N-Propyl Benzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
2-Chlorotoluene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
4-Chlorotoluene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
T-Butyl Benzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
S-Butyl Benzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
P-Isopropyltoluene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
N-Butylbenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	UG/L	10	07/31/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Hexachlorobutadiene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Naphthalene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	UG/L	2.0	07/31/2019	DLC
Vinyl Acetate	EPA-8260	U	UG/L	10	07/31/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-080119W - Batch 143795 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Chloromethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Vinyl Chloride	EPA-8260	U	UG/L	0.20	08/01/2019	DLC
Bromomethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Chloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Carbon Tetrachloride	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Trichlorofluoromethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Carbon Disulfide	EPA-8260	U	UG/L	2.0	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS SDG#:	EV19070213
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Sean Trimble		
CLIENT PROJECT:	64001		

LABORATORY BLANK RESULTS

MB-080119W - Batch 143795 - Water by EPA-8260

Acetone	EPA-8260	U	UG/L	25	08/01/2019	DLC
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Methylene Chloride	EPA-8260	U	UG/L	5.0	08/01/2019	DLC
Acrylonitrile	EPA-8260	U	UG/L	10	08/01/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,1-Dichloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
2-Butanone	EPA-8260	U	UG/L	10	08/01/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
2,2-Dichloropropane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Bromochloromethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Chloroform	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,1-Dichloropropene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2-Dichloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Benzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Trichloroethene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2-Dichloropropane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Dibromomethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Bromodichloromethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	UG/L	10	08/01/2019	DLC
Toluene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
2-Hexanone	EPA-8260	U	UG/L	10	08/01/2019	DLC
1,3-Dichloropropane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Tetrachloroethylene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Dibromochloromethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2-Dibromoethane	EPA-8260	U	UG/L	0.010	08/01/2019	DLC
Chlorobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Ethylbenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
m,p-Xylene	EPA-8260	U	UG/L	4.0	08/01/2019	DLC
Styrene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
o-Xylene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Bromoform	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Isopropylbenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Bromobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC

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CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE: ALS SDG#: WDOE ACCREDITATION:	8/6/2019 EV19070213 C601
CLIENT CONTACT:	Sean Trimble		
CLIENT PROJECT:	64001		

LABORATORY BLANK RESULTS

MB-080119W - Batch 143795 - Water by EPA-8260

N-Propyl Benzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
2-Chlorotoluene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
4-Chlorotoluene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
T-Butyl Benzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
S-Butyl Benzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
P-Isopropyltoluene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
N-Butylbenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	UG/L	10	08/01/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Hexachlorobutadiene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Naphthalene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	UG/L	2.0	08/01/2019	DLC
Vinyl Acetate	EPA-8260	U	UG/L	10	08/01/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-080219W2 - Batch 143816 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Chloromethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Vinyl Chloride	EPA-8260	U	UG/L	0.20	08/02/2019	DLC
Bromomethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Chloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Carbon Tetrachloride	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Trichlorofluoromethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Carbon Disulfide	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Acetone	EPA-8260	U	UG/L	25	08/02/2019	DLC
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Methylene Chloride	EPA-8260	U	UG/L	5.0	08/02/2019	DLC
Acrylonitrile	EPA-8260	U	UG/L	10	08/02/2019	DLC
Methyl T-Butyl Ether	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,1-Dichloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
2-Butanone	EPA-8260	U	UG/L	10	08/02/2019	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
2,2-Dichloropropane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC

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CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS SDG#:	EV19070213
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Sean Trimble		
CLIENT PROJECT:	64001		

LABORATORY BLANK RESULTS

MB-080219W2 - Batch 143816 - Water by EPA-8260

Bromochloromethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Chloroform	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,1,1-Trichloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,1-Dichloropropene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2-Dichloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Benzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Trichloroethene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2-Dichloropropane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Dibromomethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Bromodichloromethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
4-Methyl-2-Pentanone	EPA-8260	U	UG/L	10	08/02/2019	DLC
Toluene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,1,2-Trichloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
2-Hexanone	EPA-8260	U	UG/L	10	08/02/2019	DLC
1,3-Dichloropropane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Tetrachloroethylene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Dibromochloromethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2-Dibromoethane	EPA-8260	U	UG/L	0.010	08/02/2019	DLC
Chlorobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Ethylbenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
m,p-Xylene	EPA-8260	U	UG/L	4.0	08/02/2019	DLC
Styrene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
o-Xylene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Bromoform	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Isopropylbenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2,3-Trichloropropane	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Bromobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
N-Propyl Benzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
2-Chlorotoluene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
4-Chlorotoluene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
T-Butyl Benzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
S-Butyl Benzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
P-Isopropyltoluene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,3-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,4-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC

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		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Sean Trimble		
CLIENT PROJECT:	64001		

LABORATORY BLANK RESULTS

MB-080219W2 - Batch 143816 - Water by EPA-8260

N-Butylbenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	UG/L	10	08/02/2019	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Hexachlorobutadiene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Naphthalene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	UG/L	2.0	08/02/2019	DLC
Vinyl Acetate	EPA-8260	U	UG/L	10	08/02/2019	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-343388 - Batch R343388 - Water by EPA-7196

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Chromium (VI)	EPA-7196	U	UG/L	10	07/30/2019	SMH

U - Analyte analyzed for but not detected at level above reporting limit.

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CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	8/6/2019
		ALS SDG#:	EV19070213
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Sean Trimble		
CLIENT PROJECT:	64001		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 143714 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane - BS	EPA-8260	**105**			50	150	07/31/2019	DLC
Dichlorodifluoromethane - BSD	EPA-8260	**100**	**5**		50	150	07/31/2019	DLC
Chloromethane - BS	EPA-8260	**87.8**			50	150	07/31/2019	DLC
Chloromethane - BSD	EPA-8260	**85.0**	**3**		50	150	07/31/2019	DLC
Vinyl Chloride - BS	EPA-8260	**90.8**			50	150	07/31/2019	DLC
Vinyl Chloride - BSD	EPA-8260	**86.3**	**5**		50	150	07/31/2019	DLC
Bromomethane - BS	EPA-8260	**88.1**			50	150	07/31/2019	DLC
Bromomethane - BSD	EPA-8260	**87.8**	**0**		50	150	07/31/2019	DLC
Chloroethane - BS	EPA-8260	**91.1**			50	150	07/31/2019	DLC
Chloroethane - BSD	EPA-8260	**88.0**	**3**		50	150	07/31/2019	DLC
Carbon Tetrachloride - BS	EPA-8260	**93.3**			50	150	07/31/2019	DLC
Carbon Tetrachloride - BSD	EPA-8260	**90.7**	**3**		50	150	07/31/2019	DLC
Trichlorofluoromethane - BS	EPA-8260	**97.4**			50	150	07/31/2019	DLC
Trichlorofluoromethane - BSD	EPA-8260	**94.0**	**3**		50	150	07/31/2019	DLC
Carbon Disulfide - BS	EPA-8260	**88.1**			50	150	07/31/2019	DLC
Carbon Disulfide - BSD	EPA-8260	**85.1**	**4**		50	150	07/31/2019	DLC
Acetone - BS	EPA-8260	**66.4**			50	150	07/31/2019	DLC
Acetone - BSD	EPA-8260	**73.3**	**10**		50	150	07/31/2019	DLC
1,1-Dichloroethene - BS	EPA-8260	**88.2**			72.5	136	07/31/2019	DLC
1,1-Dichloroethene - BSD	EPA-8260	**84.9**	**4**		72.5	136	07/31/2019	DLC
Methylene Chloride - BS	EPA-8260	**57.8**			50	150	07/31/2019	DLC
Methylene Chloride - BSD	EPA-8260	**58.9**	**2**		50	150	07/31/2019	DLC
Acrylonitrile - BS	EPA-8260	**91.7**			50	150	07/31/2019	DLC
Acrylonitrile - BSD	EPA-8260	**89.0**	**3**		50	150	07/31/2019	DLC
Methyl T-Butyl Ether - BS	EPA-8260	**91.1**			50	150	07/31/2019	DLC
Methyl T-Butyl Ether - BSD	EPA-8260	**94.3**	**4**		50	150	07/31/2019	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	**89.5**			50	150	07/31/2019	DLC
Trans-1,2-Dichloroethene - BSD	EPA-8260	**87.5**	**2**		50	150	07/31/2019	DLC
1,1-Dichloroethane - BS	EPA-8260	**89.8**			50	150	07/31/2019	DLC
1,1-Dichloroethane - BSD	EPA-8260	**89.0**	**1**		50	150	07/31/2019	DLC
2-Butanone - BS	EPA-8260	**92.5**			50	150	07/31/2019	DLC
2-Butanone - BSD	EPA-8260	**99.4**	**7**		50	150	07/31/2019	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	**90.4**			50	150	07/31/2019	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	**89.6**	**1**		50	150	07/31/2019	DLC
2,2-Dichloropropane - BS	EPA-8260	**101**			50	150	07/31/2019	DLC
2,2-Dichloropropane - BSD	EPA-8260	**95.5**	**5**		50	150	07/31/2019	DLC
Bromochloromethane - BS	EPA-8260	**86.6**			50	150	07/31/2019	DLC
Bromochloromethane - BSD	EPA-8260	**88.3**	**2**		50	150	07/31/2019	DLC
Chloroform - BS	EPA-8260	**96.1**			50	150	07/31/2019	DLC

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CLIENT CONTACT: Sean Trimble
CLIENT PROJECT: 64001

DATE: 8/6/2019
ALS SDG#: EV19070213
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Chloroform - BSD	EPA-8260	**96.1**	**0**		50	150	07/31/2019	DLC
1,1,1-Trichloroethane - BS	EPA-8260	**89.9**			50	150	07/31/2019	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	**87.6**	**3**		50	150	07/31/2019	DLC
1,1-Dichloropropene - BS	EPA-8260	**91.5**			50	150	07/31/2019	DLC
1,1-Dichloropropene - BSD	EPA-8260	**89.0**	**3**		50	150	07/31/2019	DLC
1,2-Dichloroethane - BS	EPA-8260	**88.4**			50	150	07/31/2019	DLC
1,2-Dichloroethane - BSD	EPA-8260	**90.3**	**2**		50	150	07/31/2019	DLC
Benzene - BS	EPA-8260	**90.0**			74.7	143	07/31/2019	DLC
Benzene - BSD	EPA-8260	**88.0**	**2**		74.7	143	07/31/2019	DLC
Trichloroethene - BS	EPA-8260	**85.3**			74.4	141	07/31/2019	DLC
Trichloroethene - BSD	EPA-8260	**83.3**	**2**		74.4	141	07/31/2019	DLC
1,2-Dichloropropane - BS	EPA-8260	**91.2**			50	150	07/31/2019	DLC
1,2-Dichloropropane - BSD	EPA-8260	**90.6**	**1**		50	150	07/31/2019	DLC
Dibromomethane - BS	EPA-8260	**94.0**			50	150	07/31/2019	DLC
Dibromomethane - BSD	EPA-8260	**96.3**	**2**		50	150	07/31/2019	DLC
Bromodichloromethane - BS	EPA-8260	**91.2**			50	150	07/31/2019	DLC
Bromodichloromethane - BSD	EPA-8260	**91.6**	**0**		50	150	07/31/2019	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	**89.0**			50	150	07/31/2019	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	**90.8**	**2**		50	150	07/31/2019	DLC
4-Methyl-2-Pentanone - BS	EPA-8260	**88.2**			50	150	07/31/2019	DLC
4-Methyl-2-Pentanone - BSD	EPA-8260	**92.5**	**5**		50	150	07/31/2019	DLC
Toluene - BS	EPA-8260	**91.6**			71.7	139	07/31/2019	DLC
Toluene - BSD	EPA-8260	**89.7**	**2**		71.7	139	07/31/2019	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	**93.2**			50	150	07/31/2019	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	**93.0**	**0**		50	150	07/31/2019	DLC
1,1,2-Trichloroethane - BS	EPA-8260	**90.3**			50	150	07/31/2019	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	**93.0**	**3**		50	150	07/31/2019	DLC
2-Hexanone - BS	EPA-8260	**87.3**			50	150	07/31/2019	DLC
2-Hexanone - BSD	EPA-8260	**92.0**	**5**		50	150	07/31/2019	DLC
1,3-Dichloropropane - BS	EPA-8260	**92.4**			50	150	07/31/2019	DLC
1,3-Dichloropropane - BSD	EPA-8260	**95.1**	**3**		50	150	07/31/2019	DLC
Tetrachloroethylene - BS	EPA-8260	**81.8**			50	150	07/31/2019	DLC
Tetrachloroethylene - BSD	EPA-8260	**80.7**	**1**		50	150	07/31/2019	DLC
Dibromochloromethane - BS	EPA-8260	**91.9**			50	150	07/31/2019	DLC
Dibromochloromethane - BSD	EPA-8260	**93.9**	**2**		50	150	07/31/2019	DLC
1,2-Dibromoethane - BS	EPA-8260	**95.4**			50	150	07/31/2019	DLC
1,2-Dibromoethane - BSD	EPA-8260	**99.2**	**4**		50	150	07/31/2019	DLC
Chlorobenzene - BS	EPA-8260	**88.0**			73	131	07/31/2019	DLC
Chlorobenzene - BSD	EPA-8260	**87.5**	**1**		73	131	07/31/2019	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	**87.0**			50	150	07/31/2019	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	**86.7**	**0**		50	150	07/31/2019	DLC
Ethylbenzene - BS	EPA-8260	**101**			50	150	07/31/2019	DLC
Ethylbenzene - BSD	EPA-8260	**99.0**	**2**		50	150	07/31/2019	DLC
m,p-Xylene - BS	EPA-8260	**87.5**			50	150	07/31/2019	DLC
m,p-Xylene - BSD	EPA-8260	**86.0**	**2**		50	150	07/31/2019	DLC
Styrene - BS	EPA-8260	**92.8**			50	150	07/31/2019	DLC
Styrene - BSD	EPA-8260	**91.8**	**1**		50	150	07/31/2019	DLC
o-Xylene - BS	EPA-8260	**87.1**			50	150	07/31/2019	DLC
o-Xylene - BSD	EPA-8260	**86.3**	**1**		50	150	07/31/2019	DLC
Bromoform - BS	EPA-8260	**92.5**			50	150	07/31/2019	DLC
Bromoform - BSD	EPA-8260	**95.7**	**3**		50	150	07/31/2019	DLC
Isopropylbenzene - BS	EPA-8260	**86.5**			50	150	07/31/2019	DLC
Isopropylbenzene - BSD	EPA-8260	**84.9**	**2**		50	150	07/31/2019	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	**86.3**			50	150	07/31/2019	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	**90.2**	**4**		50	150	07/31/2019	DLC
1,2,3-Trichloropropane - BS	EPA-8260	**84.8**			50	150	07/31/2019	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	**88.4**	**4**		50	150	07/31/2019	DLC
Bromobenzene - BS	EPA-8260	**87.6**			50	150	07/31/2019	DLC
Bromobenzene - BSD	EPA-8260	**87.6**	**0**		50	150	07/31/2019	DLC
N-Propyl Benzene - BS	EPA-8260	**85.1**			50	150	07/31/2019	DLC
N-Propyl Benzene - BSD	EPA-8260	**83.8**	**2**		50	150	07/31/2019	DLC
2-Chlorotoluene - BS	EPA-8260	**103**			50	150	07/31/2019	DLC
2-Chlorotoluene - BSD	EPA-8260	**102**	**1**		50	150	07/31/2019	DLC
1,3,5-Trimethylbenzene - BS	EPA-8260	**104**			50	150	07/31/2019	DLC
1,3,5-Trimethylbenzene - BSD	EPA-8260	**102**	**2**		50	150	07/31/2019	DLC
4-Chlorotoluene - BS	EPA-8260	**87.4**			50	150	07/31/2019	DLC
4-Chlorotoluene - BSD	EPA-8260	**86.8**	**1**		50	150	07/31/2019	DLC
T-Butyl Benzene - BS	EPA-8260	**96.7**			50	150	07/31/2019	DLC
T-Butyl Benzene - BSD	EPA-8260	**95.0**	**2**		50	150	07/31/2019	DLC
1,2,4-Trimethylbenzene - BS	EPA-8260	**86.4**			50	150	07/31/2019	DLC
1,2,4-Trimethylbenzene - BSD	EPA-8260	**85.0**	**2**		50	150	07/31/2019	DLC
S-Butyl Benzene - BS	EPA-8260	**86.6**			50	150	07/31/2019	DLC
S-Butyl Benzene - BSD	EPA-8260	**84.9**	**2**		50	150	07/31/2019	DLC
P-Isopropyltoluene - BS	EPA-8260	**89.7**			50	150	07/31/2019	DLC
P-Isopropyltoluene - BSD	EPA-8260	**87.9**	**2**		50	150	07/31/2019	DLC
1,3-Dichlorobenzene - BS	EPA-8260	**92.0**			50	150	07/31/2019	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	**91.6**	**0**		50	150	07/31/2019	DLC
1,4-Dichlorobenzene - BS	EPA-8260	**92.8**			50	150	07/31/2019	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	**91.4**	**1**		50	150	07/31/2019	DLC
N-Butylbenzene - BS	EPA-8260	**100**			50	150	07/31/2019	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
N-Butylbenzene - BSD	EPA-8260	**97.8**	**2**		50	150	07/31/2019	DLC
1,2-Dichlorobenzene - BS	EPA-8260	**90.9**			50	150	07/31/2019	DLC
1,2-Dichlorobenzene - BSD	EPA-8260	**90.9**	**0**		50	150	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	**94.8**			50	150	07/31/2019	DLC
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	**101**	**6**		50	150	07/31/2019	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	**91.7**			50	150	07/31/2019	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	**92.2**	**1**		50	150	07/31/2019	DLC
Hexachlorobutadiene - BS	EPA-8260	**96.1**			50	150	07/31/2019	DLC
Hexachlorobutadiene - BSD	EPA-8260	**94.5**	**2**		50	150	07/31/2019	DLC
Naphthalene - BS	EPA-8260	**90.0**			50	150	07/31/2019	DLC
Naphthalene - BSD	EPA-8260	**93.3**	**4**		50	150	07/31/2019	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	**91.9**			50	150	07/31/2019	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	**92.6**	**1**		50	150	07/31/2019	DLC
Vinyl Acetate - BS	EPA-8260	**93.0**			50	150	07/31/2019	DLC
Vinyl Acetate - BSD	EPA-8260	**98.0**	**5**		50	150	07/31/2019	DLC

ALS Test Batch ID: 143795 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane - BS	EPA-8260	**121**			50	150	08/01/2019	DLC
Dichlorodifluoromethane - BSD	EPA-8260	**105**	**14**		50	150	08/01/2019	DLC
Chloromethane - BS	EPA-8260	**96.4**			50	150	08/01/2019	DLC
Chloromethane - BSD	EPA-8260	**82.9**	**15**		50	150	08/01/2019	DLC
Vinyl Chloride - BS	EPA-8260	**104**			50	150	08/01/2019	DLC
Vinyl Chloride - BSD	EPA-8260	**90.0**	**14**		50	150	08/01/2019	DLC
Bromomethane - BS	EPA-8260	**78.2**			50	150	08/01/2019	DLC
Bromomethane - BSD	EPA-8260	**68.9**	**13**		50	150	08/01/2019	DLC
Chloroethane - BS	EPA-8260	**104**			50	150	08/01/2019	DLC
Chloroethane - BSD	EPA-8260	**90.9**	**14**		50	150	08/01/2019	DLC
Carbon Tetrachloride - BS	EPA-8260	**108**			50	150	08/01/2019	DLC
Carbon Tetrachloride - BSD	EPA-8260	**94.8**	**13**		50	150	08/01/2019	DLC
Trichlorofluoromethane - BS	EPA-8260	**113**			50	150	08/01/2019	DLC
Trichlorofluoromethane - BSD	EPA-8260	**98.1**	**14**		50	150	08/01/2019	DLC
Carbon Disulfide - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
Carbon Disulfide - BSD	EPA-8260	**89.2**	**14**		50	150	08/01/2019	DLC
Acetone - BS	EPA-8260	**114**			50	150	08/01/2019	DLC
Acetone - BSD	EPA-8260	**93.7**	**20**		50	150	08/01/2019	DLC
1,1-Dichloroethene - BS	EPA-8260	**102**			72.5	136	08/01/2019	DLC
1,1-Dichloroethene - BSD	EPA-8260	**89.1**	**14**		72.5	136	08/01/2019	DLC
Methylene Chloride - BS	EPA-8260	**76.4**			50	150	08/01/2019	DLC

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SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Methylene Chloride - BSD	EPA-8260	**63.3**	**19**		50	150	08/01/2019	DLC
Acrylonitrile - BS	EPA-8260	**106**			50	150	08/01/2019	DLC
Acrylonitrile - BSD	EPA-8260	**93.0**	**13**		50	150	08/01/2019	DLC
Methyl T-Butyl Ether - BS	EPA-8260	**100**			50	150	08/01/2019	DLC
Methyl T-Butyl Ether - BSD	EPA-8260	**93.1**	**8**		50	150	08/01/2019	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	**104**			50	150	08/01/2019	DLC
Trans-1,2-Dichloroethene - BSD	EPA-8260	**90.8**	**13**		50	150	08/01/2019	DLC
1,1-Dichloroethane - BS	EPA-8260	**102**			50	150	08/01/2019	DLC
1,1-Dichloroethane - BSD	EPA-8260	**90.2**	**12**		50	150	08/01/2019	DLC
2-Butanone - BS	EPA-8260	**119**			50	150	08/01/2019	DLC
2-Butanone - BSD	EPA-8260	**107**	**10**		50	150	08/01/2019	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	**102**			50	150	08/01/2019	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	**91.0**	**12**		50	150	08/01/2019	DLC
2,2-Dichloropropane - BS	EPA-8260	**121**			50	150	08/01/2019	DLC
2,2-Dichloropropane - BSD	EPA-8260	**104**	**15**		50	150	08/01/2019	DLC
Bromochloromethane - BS	EPA-8260	**94.5**			50	150	08/01/2019	DLC
Bromochloromethane - BSD	EPA-8260	**85.5**	**10**		50	150	08/01/2019	DLC
Chloroform - BS	EPA-8260	**108**			50	150	08/01/2019	DLC
Chloroform - BSD	EPA-8260	**96.6**	**11**		50	150	08/01/2019	DLC
1,1,1-Trichloroethane - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	**91.1**	**12**		50	150	08/01/2019	DLC
1,1-Dichloropropene - BS	EPA-8260	**106**			50	150	08/01/2019	DLC
1,1-Dichloropropene - BSD	EPA-8260	**93.0**	**13**		50	150	08/01/2019	DLC
1,2-Dichloroethane - BS	EPA-8260	**96.3**			50	150	08/01/2019	DLC
1,2-Dichloroethane - BSD	EPA-8260	**88.8**	**8**		50	150	08/01/2019	DLC
Benzene - BS	EPA-8260	**101**			74.7	143	08/01/2019	DLC
Benzene - BSD	EPA-8260	**89.7**	**12**		74.7	143	08/01/2019	DLC
Trichloroethene - BS	EPA-8260	**98.3**			74.4	141	08/01/2019	DLC
Trichloroethene - BSD	EPA-8260	**87.3**	**12**		74.4	141	08/01/2019	DLC
1,2-Dichloropropane - BS	EPA-8260	**100**			50	150	08/01/2019	DLC
1,2-Dichloropropane - BSD	EPA-8260	**91.6**	**9**		50	150	08/01/2019	DLC
Dibromomethane - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
Dibromomethane - BSD	EPA-8260	**97.0**	**6**		50	150	08/01/2019	DLC
Bromodichloromethane - BS	EPA-8260	**100**			50	150	08/01/2019	DLC
Bromodichloromethane - BSD	EPA-8260	**90.8**	**10**		50	150	08/01/2019	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	**98.1**			50	150	08/01/2019	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	**90.6**	**8**		50	150	08/01/2019	DLC
4-Methyl-2-Pentanone - BS	EPA-8260	**94.3**			50	150	08/01/2019	DLC
4-Methyl-2-Pentanone - BSD	EPA-8260	**89.4**	**5**		50	150	08/01/2019	DLC
Toluene - BS	EPA-8260	**104**			71.7	139	08/01/2019	DLC

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Toluene - BSD	EPA-8260	**91.9**	**12**		71.7	139	08/01/2019	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	**93.2**	**10**		50	150	08/01/2019	DLC
1,1,2-Trichloroethane - BS	EPA-8260	**96.8**			50	150	08/01/2019	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	**91.5**	**6**		50	150	08/01/2019	DLC
2-Hexanone - BS	EPA-8260	**96.6**			50	150	08/01/2019	DLC
2-Hexanone - BSD	EPA-8260	**91.4**	**5**		50	150	08/01/2019	DLC
1,3-Dichloropropane - BS	EPA-8260	**98.8**			50	150	08/01/2019	DLC
1,3-Dichloropropane - BSD	EPA-8260	**93.3**	**6**		50	150	08/01/2019	DLC
Tetrachloroethylene - BS	EPA-8260	**93.0**			50	150	08/01/2019	DLC
Tetrachloroethylene - BSD	EPA-8260	**84.1**	**10**		50	150	08/01/2019	DLC
Dibromochloromethane - BS	EPA-8260	**98.5**			50	150	08/01/2019	DLC
Dibromochloromethane - BSD	EPA-8260	**92.1**	**7**		50	150	08/01/2019	DLC
1,2-Dibromoethane - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
1,2-Dibromoethane - BSD	EPA-8260	**97.5**	**6**		50	150	08/01/2019	DLC
Chlorobenzene - BS	EPA-8260	**97.4**			73	131	08/01/2019	DLC
Chlorobenzene - BSD	EPA-8260	**88.0**	**10**		73	131	08/01/2019	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	**94.2**			50	150	08/01/2019	DLC
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	**86.5**	**8**		50	150	08/01/2019	DLC
Ethylbenzene - BS	EPA-8260	**113**			50	150	08/01/2019	DLC
Ethylbenzene - BSD	EPA-8260	**101**	**11**		50	150	08/01/2019	DLC
m,p-Xylene - BS	EPA-8260	**98.5**			50	150	08/01/2019	DLC
m,p-Xylene - BSD	EPA-8260	**88.3**	**11**		50	150	08/01/2019	DLC
Styrene - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
Styrene - BSD	EPA-8260	**92.6**	**11**		50	150	08/01/2019	DLC
o-Xylene - BS	EPA-8260	**96.6**			50	150	08/01/2019	DLC
o-Xylene - BSD	EPA-8260	**87.1**	**10**		50	150	08/01/2019	DLC
Bromoform - BS	EPA-8260	**100**			50	150	08/01/2019	DLC
Bromoform - BSD	EPA-8260	**94.0**	**6**		50	150	08/01/2019	DLC
Isopropylbenzene - BS	EPA-8260	**97.6**			50	150	08/01/2019	DLC
Isopropylbenzene - BSD	EPA-8260	**87.2**	**11**		50	150	08/01/2019	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	**90.3**			50	150	08/01/2019	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	**87.4**	**3**		50	150	08/01/2019	DLC
1,2,3-Trichloropropane - BS	EPA-8260	**89.2**			50	150	08/01/2019	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	**86.3**	**3**		50	150	08/01/2019	DLC
Bromobenzene - BS	EPA-8260	**94.3**			50	150	08/01/2019	DLC
Bromobenzene - BSD	EPA-8260	**88.1**	**7**		50	150	08/01/2019	DLC
N-Propyl Benzene - BS	EPA-8260	**95.2**			50	150	08/01/2019	DLC
N-Propyl Benzene - BSD	EPA-8260	**85.7**	**11**		50	150	08/01/2019	DLC
2-Chlorotoluene - BS	EPA-8260	**113**			50	150	08/01/2019	DLC

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT: Sean Trimble
CLIENT PROJECT: 64001

DATE: 8/6/2019
ALS SDG#: EV19070213
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
2-Chlorotoluene - BSD	EPA-8260	**103**	**9**		50	150	08/01/2019	DLC
1,3,5-Trimethylbenzene - BS	EPA-8260	**114**			50	150	08/01/2019	DLC
1,3,5-Trimethylbenzene - BSD	EPA-8260	**104**	**10**		50	150	08/01/2019	DLC
4-Chlorotoluene - BS	EPA-8260	**96.2**			50	150	08/01/2019	DLC
4-Chlorotoluene - BSD	EPA-8260	**87.6**	**9**		50	150	08/01/2019	DLC
T-Butyl Benzene - BS	EPA-8260	**107**			50	150	08/01/2019	DLC
T-Butyl Benzene - BSD	EPA-8260	**96.8**	**10**		50	150	08/01/2019	DLC
1,2,4-Trimethylbenzene - BS	EPA-8260	**97.9**			50	150	08/01/2019	DLC
1,2,4-Trimethylbenzene - BSD	EPA-8260	**89.4**	**9**		50	150	08/01/2019	DLC
S-Butyl Benzene - BS	EPA-8260	**96.8**			50	150	08/01/2019	DLC
S-Butyl Benzene - BSD	EPA-8260	**87.6**	**10**		50	150	08/01/2019	DLC
P-Isopropyltoluene - BS	EPA-8260	**100**			50	150	08/01/2019	DLC
P-Isopropyltoluene - BSD	EPA-8260	**90.7**	**10**		50	150	08/01/2019	DLC
1,3-Dichlorobenzene - BS	EPA-8260	**102**			50	150	08/01/2019	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	**92.5**	**9**		50	150	08/01/2019	DLC
1,4-Dichlorobenzene - BS	EPA-8260	**100**			50	150	08/01/2019	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	**65.1**	**42**		50	150	08/01/2019	DLC
N-Butylbenzene - BS	EPA-8260	**114**			50	150	08/01/2019	DLC
N-Butylbenzene - BSD	EPA-8260	**103**	**10**		50	150	08/01/2019	DLC
1,2-Dichlorobenzene - BS	EPA-8260	**99.0**			50	150	08/01/2019	DLC
1,2-Dichlorobenzene - BSD	EPA-8260	**90.4**	**9**		50	150	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	**101**			50	150	08/01/2019	DLC
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	**98.0**	**3**		50	150	08/01/2019	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	**105**			50	150	08/01/2019	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	**98.7**	**6**		50	150	08/01/2019	DLC
Hexachlorobutadiene - BS	EPA-8260	**113**			50	150	08/01/2019	DLC
Hexachlorobutadiene - BSD	EPA-8260	**102**	**10**		50	150	08/01/2019	DLC
Naphthalene - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
Naphthalene - BSD	EPA-8260	**101**	**3**		50	150	08/01/2019	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	**106**			50	150	08/01/2019	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	**98.8**	**7**		50	150	08/01/2019	DLC
Vinyl Acetate - BS	EPA-8260	**103**			50	150	08/01/2019	DLC
Vinyl Acetate - BSD	EPA-8260	**96.9**	**6**		50	150	08/01/2019	DLC

ALS Test Batch ID: 143816 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane - BS	EPA-8260	**122**			50	150	08/02/2019	DLC
Dichlorodifluoromethane - BSD	EPA-8260	**127**	**4**		50	150	08/02/2019	DLC
Chloromethane - BS	EPA-8260	**96.5**			50	150	08/02/2019	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Chloromethane - BSD	EPA-8260	**101**	**5**		50	150	08/02/2019	DLC
Vinyl Chloride - BS	EPA-8260	**104**			50	150	08/02/2019	DLC
Vinyl Chloride - BSD	EPA-8260	**109**	**5**		50	150	08/02/2019	DLC
Bromomethane - BS	EPA-8260	**59.1**			50	150	08/02/2019	DLC
Bromomethane - BSD	EPA-8260	**66.0**	**11**		50	150	08/02/2019	DLC
Chloroethane - BS	EPA-8260	**104**			50	150	08/02/2019	DLC
Chloroethane - BSD	EPA-8260	**109**	**5**		50	150	08/02/2019	DLC
Carbon Tetrachloride - BS	EPA-8260	**107**			50	150	08/02/2019	DLC
Carbon Tetrachloride - BSD	EPA-8260	**114**	**6**		50	150	08/02/2019	DLC
Trichlorofluoromethane - BS	EPA-8260	**113**			50	150	08/02/2019	DLC
Trichlorofluoromethane - BSD	EPA-8260	**117**	**4**		50	150	08/02/2019	DLC
Carbon Disulfide - BS	EPA-8260	**103**			50	150	08/02/2019	DLC
Carbon Disulfide - BSD	EPA-8260	**108**	**5**		50	150	08/02/2019	DLC
Acetone - BS	EPA-8260	**129**			50	150	08/02/2019	DLC
Acetone - BSD	EPA-8260	**110**	**16**		50	150	08/02/2019	DLC
1,1-Dichloroethene - BS	EPA-8260	**102**			72.5	136	08/02/2019	DLC
1,1-Dichloroethene - BSD	EPA-8260	**107**	**5**		72.5	136	08/02/2019	DLC
Methylene Chloride - BS	EPA-8260	**65.6**			50	150	08/02/2019	DLC
Methylene Chloride - BSD	EPA-8260	**75.2**	**14**		50	150	08/02/2019	DLC
Acrylonitrile - BS	EPA-8260	**106**			50	150	08/02/2019	DLC
Acrylonitrile - BSD	EPA-8260	**111**	**5**		50	150	08/02/2019	DLC
Methyl T-Butyl Ether - BS	EPA-8260	**97.7**			50	150	08/02/2019	DLC
Methyl T-Butyl Ether - BSD	EPA-8260	**106**	**8**		50	150	08/02/2019	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	**103**			50	150	08/02/2019	DLC
Trans-1,2-Dichloroethene - BSD	EPA-8260	**109**	**5**		50	150	08/02/2019	DLC
1,1-Dichloroethane - BS	EPA-8260	**101**			50	150	08/02/2019	DLC
1,1-Dichloroethane - BSD	EPA-8260	**107**	**6**		50	150	08/02/2019	DLC
2-Butanone - BS	EPA-8260	**124**			50	150	08/02/2019	DLC
2-Butanone - BSD	EPA-8260	**122**	**1**		50	150	08/02/2019	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	**101**			50	150	08/02/2019	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	**108**	**6**		50	150	08/02/2019	DLC
2,2-Dichloropropane - BS	EPA-8260	**122**			50	150	08/02/2019	DLC
2,2-Dichloropropane - BSD	EPA-8260	**126**	**3**		50	150	08/02/2019	DLC
Bromochloromethane - BS	EPA-8260	**91.3**			50	150	08/02/2019	DLC
Bromochloromethane - BSD	EPA-8260	**98.5**	**8**		50	150	08/02/2019	DLC
Chloroform - BS	EPA-8260	**107**			50	150	08/02/2019	DLC
Chloroform - BSD	EPA-8260	**114**	**6**		50	150	08/02/2019	DLC
1,1,1-Trichloroethane - BS	EPA-8260	**102**			50	150	08/02/2019	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	**109**	**6**		50	150	08/02/2019	DLC
1,1-Dichloropropene - BS	EPA-8260	**106**			50	150	08/02/2019	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloropropene - BSD	EPA-8260	**111**	**5**		50	150	08/02/2019	DLC
1,2-Dichloroethane - BS	EPA-8260	**94.3**			50	150	08/02/2019	DLC
1,2-Dichloroethane - BSD	EPA-8260	**102**	**8**		50	150	08/02/2019	DLC
Benzene - BS	EPA-8260	**100**			74.7	143	08/02/2019	DLC
Benzene - BSD	EPA-8260	**107**	**6**		74.7	143	08/02/2019	DLC
Trichloroethene - BS	EPA-8260	**97.9**			74.4	141	08/02/2019	DLC
Trichloroethene - BSD	EPA-8260	**103**	**5**		74.4	141	08/02/2019	DLC
1,2-Dichloropropane - BS	EPA-8260	**99.1**			50	150	08/02/2019	DLC
1,2-Dichloropropane - BSD	EPA-8260	**106**	**7**		50	150	08/02/2019	DLC
Dibromomethane - BS	EPA-8260	**101**			50	150	08/02/2019	DLC
Dibromomethane - BSD	EPA-8260	**110**	**8**		50	150	08/02/2019	DLC
Bromodichloromethane - BS	EPA-8260	**99.0**			50	150	08/02/2019	DLC
Bromodichloromethane - BSD	EPA-8260	**106**	**7**		50	150	08/02/2019	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	**97.5**			50	150	08/02/2019	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	**107**	**9**		50	150	08/02/2019	DLC
4-Methyl-2-Pentanone - BS	EPA-8260	**92.5**			50	150	08/02/2019	DLC
4-Methyl-2-Pentanone - BSD	EPA-8260	**101**	**9**		50	150	08/02/2019	DLC
Toluene - BS	EPA-8260	**103**			71.7	139	08/02/2019	DLC
Toluene - BSD	EPA-8260	**109**	**6**		71.7	139	08/02/2019	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	**102**			50	150	08/02/2019	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	**110**	**7**		50	150	08/02/2019	DLC
1,1,2-Trichloroethane - BS	EPA-8260	**96.1**			50	150	08/02/2019	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	**105**	**9**		50	150	08/02/2019	DLC
2-Hexanone - BS	EPA-8260	**103**			50	150	08/02/2019	DLC
2-Hexanone - BSD	EPA-8260	**105**	**2**		50	150	08/02/2019	DLC
1,3-Dichloropropane - BS	EPA-8260	**98.3**			50	150	08/02/2019	DLC
1,3-Dichloropropane - BSD	EPA-8260	**107**	**9**		50	150	08/02/2019	DLC
Tetrachloroethylene - BS	EPA-8260	**92.1**			50	150	08/02/2019	DLC
Tetrachloroethylene - BSD	EPA-8260	**97.4**	**6**		50	150	08/02/2019	DLC
Dibromochloromethane - BS	EPA-8260	**98.0**			50	150	08/02/2019	DLC
Dibromochloromethane - BSD	EPA-8260	**107**	**9**		50	150	08/02/2019	DLC
1,2-Dibromoethane - BS	EPA-8260	**102**			50	150	08/02/2019	DLC
1,2-Dibromoethane - BSD	EPA-8260	**112**	**9**		50	150	08/02/2019	DLC
Chlorobenzene - BS	EPA-8260	**97.2**			73	131	08/02/2019	DLC
Chlorobenzene - BSD	EPA-8260	**104**	**7**		73	131	08/02/2019	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	**93.5**			50	150	08/02/2019	DLC
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	**102**	**8**		50	150	08/02/2019	DLC
Ethylbenzene - BS	EPA-8260	**113**			50	150	08/02/2019	DLC
Ethylbenzene - BSD	EPA-8260	**122**	**7**		50	150	08/02/2019	DLC
m,p-Xylene - BS	EPA-8260	**98.4**			50	150	08/02/2019	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
m,p-Xylene - BSD	EPA-8260	**105**	**7**		50	150	08/02/2019	DLC
Styrene - BS	EPA-8260	**103**			50	150	08/02/2019	DLC
Styrene - BSD	EPA-8260	**112**	**8**		50	150	08/02/2019	DLC
o-Xylene - BS	EPA-8260	**96.4**			50	150	08/02/2019	DLC
o-Xylene - BSD	EPA-8260	**104**	**8**		50	150	08/02/2019	DLC
Bromoform - BS	EPA-8260	**97.7**			50	150	08/02/2019	DLC
Bromoform - BSD	EPA-8260	**108**	**10**		50	150	08/02/2019	DLC
Isopropylbenzene - BS	EPA-8260	**97.8**			50	150	08/02/2019	DLC
Isopropylbenzene - BSD	EPA-8260	**104**	**6**		50	150	08/02/2019	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	**86.5**			50	150	08/02/2019	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	**98.2**	**13**		50	150	08/02/2019	DLC
1,2,3-Trichloropropane - BS	EPA-8260	**84.6**			50	150	08/02/2019	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	**96.7**	**13**		50	150	08/02/2019	DLC
Bromobenzene - BS	EPA-8260	**91.8**			50	150	08/02/2019	DLC
Bromobenzene - BSD	EPA-8260	**103**	**12**		50	150	08/02/2019	DLC
N-Propyl Benzene - BS	EPA-8260	**92.8**			50	150	08/02/2019	DLC
N-Propyl Benzene - BSD	EPA-8260	**102**	**9**		50	150	08/02/2019	DLC
2-Chlorotoluene - BS	EPA-8260	**110**			50	150	08/02/2019	DLC
2-Chlorotoluene - BSD	EPA-8260	**122**	**10**		50	150	08/02/2019	DLC
1,3,5-Trimethylbenzene - BS	EPA-8260	**111**			50	150	08/02/2019	DLC
1,3,5-Trimethylbenzene - BSD	EPA-8260	**123**	**10**		50	150	08/02/2019	DLC
4-Chlorotoluene - BS	EPA-8260	**93.2**			50	150	08/02/2019	DLC
4-Chlorotoluene - BSD	EPA-8260	**104**	**11**		50	150	08/02/2019	DLC
T-Butyl Benzene - BS	EPA-8260	**104**			50	150	08/02/2019	DLC
T-Butyl Benzene - BSD	EPA-8260	**113**	**9**		50	150	08/02/2019	DLC
1,2,4-Trimethylbenzene - BS	EPA-8260	**91.3**			50	150	08/02/2019	DLC
1,2,4-Trimethylbenzene - BSD	EPA-8260	**101**	**11**		50	150	08/02/2019	DLC
S-Butyl Benzene - BS	EPA-8260	**94.7**			50	150	08/02/2019	DLC
S-Butyl Benzene - BSD	EPA-8260	**103**	**9**		50	150	08/02/2019	DLC
P-Isopropyltoluene - BS	EPA-8260	**97.4**			50	150	08/02/2019	DLC
P-Isopropyltoluene - BSD	EPA-8260	**107**	**10**		50	150	08/02/2019	DLC
1,3-Dichlorobenzene - BS	EPA-8260	**99.1**			50	150	08/02/2019	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	**110**	**10**		50	150	08/02/2019	DLC
1,4-Dichlorobenzene - BS	EPA-8260	**95.3**			50	150	08/02/2019	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	**109**	**14**		50	150	08/02/2019	DLC
N-Butylbenzene - BS	EPA-8260	**111**			50	150	08/02/2019	DLC
N-Butylbenzene - BSD	EPA-8260	**122**	**10**		50	150	08/02/2019	DLC
1,2-Dichlorobenzene - BS	EPA-8260	**94.9**			50	150	08/02/2019	DLC
1,2-Dichlorobenzene - BSD	EPA-8260	**107**	**12**		50	150	08/02/2019	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	**96.4**			50	150	08/02/2019	DLC

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CLIENT PROJECT:	64001		

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	**112**	**15**		50	150	08/02/2019	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	**101**			50	150	08/02/2019	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	**117**	**14**		50	150	08/02/2019	DLC
Hexachlorobutadiene - BS	EPA-8260	**108**			50	150	08/02/2019	DLC
Hexachlorobutadiene - BSD	EPA-8260	**120**	**10**		50	150	08/02/2019	DLC
Naphthalene - BS	EPA-8260	**99.2**			50	150	08/02/2019	DLC
Naphthalene - BSD	EPA-8260	**118**	**17**		50	150	08/02/2019	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	**101**			50	150	08/02/2019	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	**119**	**16**		50	150	08/02/2019	DLC
Vinyl Acetate - BS	EPA-8260	**101**			50	150	08/02/2019	DLC
Vinyl Acetate - BSD	EPA-8260	**110**	**9**		50	150	08/02/2019	DLC

ALS Test Batch ID: R343388 - Water by EPA-7196

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Chromium (VI) - BS	EPA-7196	**101**			90	114	07/30/2019	SMH
Chromium (VI) - BSD	EPA-7196	**104**	**3**		90	114	07/30/2019	SMH

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1907021 3

Date 7/30/19 Page 1 Of 3

PROJECT ID: 64001
REPORT TO COMPANY: Environmental Partners Inc.
PROJECT MANAGER: Sean Trimble
ADDRESS: 1180 NW Maple St. Suite 310
Issaquah, WA 98027
PHONE: (425) 395-0010 P.O. #:
E-MAIL: seant@epi-wa.com
INVOICE TO COMPANY: EPI
ATTENTION: Sean Trimble
ADDRESS: 1180 NW Maple St Suite 310
Issaquah, WA 98027

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify): Htx - Chrome								NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW-2 (2,3,4)	7/29/19	1230	Water	1							X																	
2. SBW-4	7/30/19	0715		2							X																	
3. MW-11	7/30/19	0725		3							X								X								
4. MW-26S	7/30/19	0745		4							X																	
5. SBW-3	7/30/19	0800		5							X								X								
6. SBW-1	7/30/19	0840		6							X																	
7. SBW-2	7/30/19	0846		7							X								X								
8. MW-8S	7/30/19	0855		8							X																	
9. DUP-1	7/30/19			9							X																	
10. MW-20S	7/30/19	0945		10							X																	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Wesley Weisberg, epi 7/30/19 1320
Received By: B Bartlett ALS 7-30-19 1320
2. Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify: _____

*Turnaround request less than standard may incur Rush Charges

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1907021 3

Date 7/30/19 Page 2 Of 3

PROJECT ID: 64001
REPORT TO COMPANY: Environmental Partners Inc.
PROJECT MANAGER: Sean Trimble
ADDRESS: 1180 NW Maple St, Suite 310
Issaquah, WA 98027
PHONE: (425) 395-0010 P.O. #:
E-MAIL: seant@epi-wa.com
INVOICE TO COMPANY: EPI
ATTENTION: Sean Trimble
ADDRESS: 1180 NW Maple St. Suite 310
Issaquah, WA 98027

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. MW-20i	7/30/19	1005	water	11
2. MW-05i	7/30/19	1054		12
3. MW-05s	7/30/19	1120		13
4. MW-23s	7/30/19	1130		14
5. MW-21s	7/30/19	1220		15
6. MW-7ir	7/30/19	1225		16
7. MW-1	7/30/19	1230		17
8. MW-7s	7/30/19	1240		18
9. MW-29s	7/30/19	1250		19
10. MW-15i	7/30/19	1257		20

ANALYSIS REQUESTED

NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
						X										
						X										
						X										
						X										
						X										
						X										
						X										
						X										
						X										
						X										

OTHER (Specify)

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Wesley Weisberg, epi, 7/30/19 1320
Received By: JJ Bottin ALS 7-30-19 1320
2. Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: [10] Standard [5] [3] [2] [1] [SAME DAY]

Fuels & Hydrocarbon Analysis: [5] Standard [3] [1] [SAME DAY]

OTHER:
Specify: _____

*Turnaround request less than standard may incur Rush Charges

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1907023

Date 7/30/19 Page 3 Of 3

PROJECT ID: 64001
REPORT TO COMPANY: Environmental Partners Inc.
PROJECT MANAGER: Sean Trimble
ADDRESS: 1180 NW Maple St. Suite 310
Issaquah, WA 98027
PHONE: (425) 395-0010 P.O. #:
E-MAIL: Seant@epi-wa.com
INVOICE TO COMPANY: Environmental Partners Inc.
ATTENTION: Sean Trimble
ADDRESS: 1180 NW Maple St. Suite 310
Issaquah, WA 98027

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. MW-14	7/30/19	1304	Water	21
2. DUP-2	7/30/19		Water	22
3. MW-15S	7/30/19	1315	Water	23
4.				
5.				
6.				
7.				
8.				
9.				
10.				

ANALYSIS REQUESTED

NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐
						X								
						X								
						X								

OTHER (Specify)

NUMBER OF CONTAINERS

RECEIVED IN GOOD CONDITION?

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Wesley Weisberg, epi, 7/30/19 1320
Received By: ALS 7-30-19 1320
2. Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify: _____

*Turnaround request less than standard may incur Rush Charges

Attachment B
Environmental Covenant Template

Environmental Covenant for MTCA Sites: Instructions for Use and Covenant Template

Established: August 20, 2015

Revised: December 22, 2016

To: Interested Persons

From: James. J. Pendowski, Program Manager
Toxics Cleanup Program

Contact: Policy & Technical Support Unit, Headquarters

Note: This is Attachment C in Procedure 440A. For additional instructions on using this Covenant, please see Toxics Cleanup Program's **Procedure 440A: Establishing Environmental Covenants under the Model Toxics Control Act,** publication no. 15-09-054.

Instructions for Use

The following steps provide guidance on how to develop an environmental covenant using the enclosed template. While the exact sequence of steps, as well as who conducts the work (Ecology, potentially liable person (PLP) or Voluntary Cleanup Program (VCP) customer), may vary from site to site, all of the elements identified here must be addressed. When requesting a Covenant, Ecology should identify which steps are the responsibilities of the PLP or VCP customer at the site. Questions about specific provisions in the Covenant template should be directed to the Ecology Cleanup Project Manager assigned to the site. If no Cleanup Project Manager has been assigned, contact Ecology's Toxics Cleanup Program at (360) 407-7170 and ask for advice from the Toxics Cleanup Program (TCP) Policy Unit.

Step 1: Identify the Parcels Subject to the Covenant

Using the County Assessors Tax records, identify the parcels subject to the Covenant. Even though the site (or part of the site subject to the Covenant) may be owned by one entity, it may actually encompass more than one parcel of real property as shown on the County's property (and tax) records.

Step 2: Identify the Specific Activity and Use Restrictions for the Property

Create a conceptual list of specific prohibited activities (e.g., don't drill wells on the property) and prohibited uses (e.g., property can't be used for residential uses).

Work with the PLP/VCP customer, the property owner, and owners of other property interests (if different) to refine the language implementing these restrictions.

Step 3: Consult with the Local Government Land Use Planning Authority

The Uniform Environmental Covenants Act (UECA) and Model Toxics Control Act (MTCA) require Ecology to "consult" with the local government land use planning authority on the terms of the Covenant. While technically the Mayor/Executive is this authority, this guidance recommends contacting the staff that who work with land use issues. However, if the jurisdiction prefers the contact be through the local elected executive, work through the Mayor/Executive instead.

Ideally, before drafting the Covenant, Ecology staff should discuss the proposed restrictions with the local government staff by phone or email. **Once the Covenant has been drafted, the full covenant should be sent to the local government for review.** This consultation should be done by Ecology, but may be delegated to the PLP or VCP customer, upon agreement by Ecology.

The purpose of this consultation is to identify provisions in the Covenant that might conflict with current or future land use plans and development regulations for the property. For example, a provision requiring the land to remain in industrial use won't hold up in the long term if the comprehensive plans for the area call for future mixed residential and commercial use development. Similarly, a provision prohibiting infiltration of stormwater anywhere on the property may conflict with local development regulations requiring all stormwater to be retained and infiltrated on the property. If there is a conflict, see if it's possible to apply the restriction to only part of the property where the exposure pathway is of concern.

Use the following table as a guide for whom to contact:

Jurisdiction	Department
City or Town	City or Town Planning Department
Unincorporated Areas	County Planning Department
Urban Growth Areas not Annexed to City or Town[1]	Both City or Town Planning Department and County Planning Department

Note: In larger communities, planning staff who work on zoning and comprehensive plan issues are typically different than those who review development proposals. *Make sure you are talking to the right staff.*

[1] City limits and urban growth area should be identified in the City's and County's comprehensive plans. They can typically be found on the local jurisdiction's website. If not, call the jurisdiction's staff to obtain a copy.

Step 4: Confirm the Recorded Interests in the Property

To determine who owns the property and any relevant property interests that may need to be superseded by the Covenant, a title search must be conducted to identify all recorded interests in the Property. The title search should be the responsibility of the PLP (or VCP customer) and conducted by a title company. **The results of this search, typically called a title report or plat certificate, must be included with any request asking Ecology to sign a Covenant.** An uninsured title report is sufficient for this purpose.

In general, the title search should be no more than six months old to ensure it reflects the current status of the property. However, under some circumstances, Ecology may accept an older title search, such as that completed during the PLP identification process. Accepting older title searches should be done only if Ecology has been closely involved with the site during the intervening time period since the last title search, and there is no reason to suspect the owner has changed or an easement or other interest in the property has been granted. Examples of changes that would trigger the need for a new title search are:

- Establishment of a new business on the property;
- Change in the name of the business currently on the property;
- Subdivision of the property;
- Construction of new utilities or roads across the property;
- Foreclosure on the property;
- Change in the status of the persons owning the property (death, divorce or marriage); and
- Bankruptcy of the site owner or operator.

Step 5: Determine Who Needs to Sign the Covenant

Real property interests are prioritized according to the date on which they were recorded with the land record authority. Such interests include not only ownership of the property, but may also include mortgages; tax or mechanics' liens; utility easements; surface land rights; and judgments. If a senior mortgage holder forecloses on the property, for instance, it may be able to dispose of all other interests, including Ecology's Covenant. For this reason, to ensure the restrictions in a Covenant are enforceable, the Covenant must supersede these pre-existing property interests.

Grantors or signatories to a Covenant not only are granting access to Ecology and agreeing to adhere to the restrictions on future activities or uses of the property, they are also agreeing to be responsible for any "affirmative obligations" described in the Covenant, such as maintaining the remedy and monitoring.

Signing a subordination agreement means the person holding a senior property interest is agreeing that the Covenant takes precedent over their interest, including providing Ecology with access, and consenting to the restrictions on future uses and activities on the property. However, they are not necessarily agreeing to the affirmative obligations in the Covenant.

Use the following as a guide to determine who must sign the Covenant as a grantor or subordinate their interests:

a) Persons holding fee simple title to the property (i.e., landowners).

The landowner must always sign the Covenant as a Grantor.

b) Persons holding other property interests (such as easements, right-of-ways, water & mineral rights).

In general, if a person holds a title to:

a) An easement or right-of-way,

b) Water rights (if groundwater use is restricted); or

c) Mineral rights,

…that is located within the area of activity or use restrictions, and compliance with those restrictions could be overridden by the person exercising their rights, then the person holding the title should either:

a) Sign the covenant as a Grantor, or

b) Subordinate their interests by signing a subordination agreement.

However, if a current contact cannot be located, or if the holder's interest is not critical to the success of the Covenant, it is probably not necessary to expend a lot of effort to track them down and obtain a signature. For example, many properties, especially in eastern Washington State, have underlying mineral rights that are controlled by someone different than the owner. In most urban areas it is unlikely those rights would be exercised to the detriment of the remedy, and so there would be no reason to pursue a signature.

Similarly, the holder of an easement or right-of-way for overhead power lines that is unlikely to affect the performance of the remedy does not need to be pursued.

However, if a cap is part of the remedy, and the easement or right-of-way grants the holder the right to conduct activities that could compromise the integrity of the cap (such as installation and maintenance of road or an underground utility), these holders should be required to sign the Covenant as a Grantor or subordinate their interests.

c) Persons holding encumbrances on the property (such as lien and mortgage holders).

In general, persons holding a lien have merely a monetary interest (lien imposed because of lack of payment of a bill) and do not need to sign the Covenant or subordinate their interests. However, if the lien holder is claiming a right that could affect the performance of the remedy, such as control over future sale and development of the property, then they should be required to subordinate their interest.

Mortgage holders such as banks usually hold the title to the property until the property owner pays off the loan for purchase of the property. Should they foreclose on a property, they may be able to extinguish all subsequent interests, including Ecology's Covenant. As such, they should be required to sign a subordination agreement.

A Covenant or subordination agreement must be voluntarily granted. There may be circumstances where the holder of an interest or encumbrance on the property (other than the property owner) refuses to grant a Covenant or subordinate their interests, can't be located, or are not responsive. In these cases, the Ecology Cleanup Project Manager should, in consultation with the Assistant Attorney General assigned to the site, consider the success of the remedy without their signature. If it is deemed necessary to secure their signature and they refuse to sign, then a more complete cleanup will be required.

In cases where there is minimal risk to the success of the remedy and it is decided to proceed without their signature, a letter should be sent to the holder of this interest or encumbrance notifying them that, should they do anything on the property that affects the integrity of the remedial action or results in a release of a hazardous substance, they could trigger liability under MTCA. If the holder of this interest is unresponsive or cannot be located, work with the Assistant Attorney General assigned to the site on an appropriate notification procedure.

Step 6: Prepare the Covenant

Use the attached Ecology template to prepare the Covenant.

A precise legal description of the Property and any interests in the Property (such as an easement) is essential to know where the Covenant applies. A map must also be developed to provide a visual representation of where the restrictions apply on the Property.

- If the restrictions apply to the entire Property, the legal description in the Property deed and a map of the Property should be sufficient.
- If the restrictions apply to only part of the Property, a new legal description and map will need to be developed, and boundary markers or reference monuments will need to be established on the Property by a licensed surveyor.

If the Property includes more than one parcel of real property, the legal description and map should cover all of the parcels. This will enable recording of the same covenant on each parcel instead of creating and recording a different covenant for each parcel.

There are specific formatting requirements that apply to recorded Covenants. For example, there must be a three inch margin on the top of the first page and a one inch margin on the bottom and sides. See Chapter 65.04.045 RCW for additional format requirements.

Step 7: Public Involvement

In general, there is no requirement for a public notice and comment period on a Covenant, other than the requirement for local government consultation discussed above. However, because a Covenant can affect future uses of a property and potentially impact future development in the area, any public notice issued for the cleanup action plan or order or decree governing the cleanup should highlight the fact that there will be restrictions on future activities or uses of the property.

For sites with a high level of public interest or controversy, it may be appropriate to provide a separate opportunity for public comment. The Ecology Cleanup Project Manager should consult with the public involvement specialist assigned to the site regarding the appropriate level of public involvement.

Step 8: Sign the Covenant

The Ecology Cleanup Project Manager must ensure all appropriate persons sign the Covenant and that each of those signatures is notarized. This responsibility can be delegated to the PLP (or VCP applicant) but Ecology staff must verify this step has been completed.

Ecology's representative should sign the Covenant only after all other parties to the Covenant have signed.

Step 9: Record the Covenant

The Covenant must be recorded on the title of each parcel of real property subject to the Covenant. Recording is done by the County Auditor. If the area covered by the Covenant extends across a County boundary, the Covenant will have to be recorded in both Counties.

Step 10: Send the Recorded Covenant to Ecology and Others per RCW 64.70.070

a. Send the original recorded Covenant to Ecology's contact for the site. [2]

b. Send a legible copy of the recorded Covenant, with the recording number evident, to the following persons (per RCW 64.70.070):

- Each person who signed the Covenant.
- Each person holding a recorded interest in the real property subject to the Covenant (including each person who subordinated their interests to Ecology's Covenant).
- Each person in possession of the real property subject to the Covenant at the time the Covenant is executed (such as renters).
- The local government planning authority in which the real property subject to the Covenant is located.
- Any other person to whom the Covenant expressly grants the power to enforce the Covenant.
- Any other persons required by Ecology.

Note: These instructions and attached template are intended solely for the guidance of Ecology staff. They are not intended, and cannot be relied on, to create rights, substantive or procedural, enforceable by any party in litigation with the state of Washington. Ecology may act at variance with these instructions and the attached template depending on site-specific circumstances, or modify or withdraw these documents at any time.

[2] Some Counties retain the original. If that is the case, make sure Ecology receives a legible copy of the recorded Covenant with all the signatures and with recorded notation.

Environmental Covenant for MTCA Sites: Covenant Template

See Toxics Cleanup Program's ***Procedure 440A*** *for additional instructions on the use of this Covenant.*

Text highlighted by yellow are instructions/comments and options.
Those instructions and related footnotes should be removed from the Covenant.

After Recording Return
Original Signed Covenant to: [1]
[ECOLOGY SITE MANAGER]
Toxics Cleanup Program
Department of Ecology
[ECOLOGY OFFICE ADDRESS]

NOTE: This Covenant is not valid without Ecology's approval and signature.

Environmental Covenant

(For MTCA Sites – August 20, 2015 Version)

Grantor: [NAME OF THE LANDOWNER OR OTHER GRANTOR] [2]
Grantee: State of Washington, Department of Ecology (hereafter "Ecology")
Brief Legal Description: [BRIEF LEGAL DESCRIPTION]
Tax Parcel Nos.: [INSERT TAX PARCEL NUMBERS]
Cross Reference: [SEE BOX]

- **If superseding or amending an existing Covenant, insert one of the following:**
  "Original Covenant #____(superseding)" OR "Original Covenant #____(amending)"
- **Insert a reference to any subordination agreements, if separately recorded**
- **Insert a list of other related documents such as consent decree, order, or NFA opinion**
- **Otherwise, delete**

RECITALS [3]

a. This document is an environmental (restrictive) covenant (hereafter "Covenant") executed pursuant to the Model Toxics Control Act ("MTCA"), chapter 70.105D RCW, and Uniform Environmental Covenants Act ("UECA"), chapter 64.70 RCW.

b. The Property that is the subject of this Covenant is part or all of a site commonly known as [ECOLOGY SITE NAME AND FACILITY ID]. The Property is legally described in Exhibit A, and illustrated in Exhibit B, both of which are attached (hereafter "Property"). If there are differences between these two Exhibits, the legal description in Exhibit A shall prevail.

c. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because residual contamination remains on the Property after completion of remedial actions. Specifically, the following principal contaminants remain on the Property: [4]

[1] Some counties keep the original Covenant, others don't. If the signed original is available, it must be sent to Ecology. If the signed original is not available, send a legible copy to Ecology.
[2] The Grantor of a Covenant typically is the fee simple land owner of the property. The Grantor may also include holders of other property interests such as a holder of an easement, right-of-way, mineral right, lien, or mortgage.
[3] This section is primarily used to describe this document and its purpose. It should not be used for substantive binding provisions.
[4] List the contaminants for the associated media. If more than a few are present, list the top three to five for each medium.

Medium	Principal Contaminants Present
Soil	
Groundwater	
Surface Water/Sediment	

d. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment and the integrity of remedial actions conducted at the site. Records describing the extent of residual contamination and remedial actions conducted are available through Ecology. ***[Optional--This includes the following documents: (list key documents such as RI/FS, Cleanup Action Plan, Voluntary Cleanup Report(s), As-built report)].***

e. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a Holder of this Covenant under UECA, Ecology has an interest in real property, however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* The rights of Ecology as an "agency" under UECA, other than its' right as a holder, are not an interest in real property.

f. ***[Include the following statement if this Covenant is superseding another environmental covenant.]*** This Covenant supersedes and replaces the existing Environmental (Restrictive) Covenant, which is recorded with [_____] County as [# OF ORIGINAL COVENANT].

COVENANT

[NAME OF LANDOWNER OR OTHER GRANTOR], as Grantor [5] and [FEE SIMPLE, EASEMENT OR OTHER] owner of the Property hereby grants to the Washington State Department of Ecology, and its successors and assignees, the following covenants. Furthermore, it is the intent of the Grantor that such covenants shall supersede any prior interests the GRANTOR has in the property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

Section 1. General Restrictions and Requirements.

The following general restrictions and requirements shall apply to the Property:

a. Interference with Remedial Action. The Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection or monitoring of that remedial action without prior written approval from Ecology.

b. Protection of Human Health and the Environment. The Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology. This includes, but is not limited to, any activity that results in the release of residual contamination that was contained as a part of the remedial action or that exacerbates or creates a new exposure to residual contamination remaining on the Property.

[5] If there is more than one Grantor, use the term "Grantors" here and throughout this document.

c. Continued Compliance Required. Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance and monitoring of remedial actions and continued compliance with this Covenant.

d. Leases. Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant and notify all lessees of the restrictions on the use of the Property.

e. Preservation of Reference Monuments. Grantor shall make a good faith effort to preserve any reference monuments and boundary markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, Grantor shall have it replaced by a licensed professional surveyor within 30 days of discovery of the damage or destruction.

Section 2. Specific Prohibitions and Requirements.

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property.

[See Appendix 1 for example restrictions.]

Select from the restrictions in Appendix 1 as appropriate, based on site-specific circumstances. Most sites will have only some of these restrictions. Options are provided to illustrate the range of potential restrictions. In some cases, the options are mutually exclusive (pick one or the other, but not both). In other cases, several options may need to be combined to cover the range of conditions at the site. This is not intended to be an all-inclusive list. In circumstances where none of the categories or suggested options fit the site conditions, adjust the language as appropriate to fit the situation.

a. Land use.
b. Containment of soil/waste materials.
c. Stormwater facilities.
d. Vapor/gas controls.
e. Groundwater use.
f. Sediments.
g. Monitoring.
h. Other.

Section 3. Access.

a. The Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor and maintain the remedial action.

b. The Grantor freely and voluntarily grants Ecology and its authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, inspect any remedial actions conducted on the Property, and to inspect related records.

c. No right of access or use by a third party to any portion of the Property is conveyed by this instrument.

Section 4. Notice Requirements.

a. Conveyance of Any Interest. The Grantor, when conveying any interest **[**IN ANY PART OF THE PROPERTY**]** ***OR*** **[**WITHIN THE AREA OF THE PROPERTY DESCRIBED AND ILLUSTRATED IN EXHIBITS B AND C**]**, including but not limited to title, easement, leases, and security or other interests, must:

i. Provide written notice to Ecology of the intended conveyance at least thirty (30) days in advance of the conveyance.[6]

ii. Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON [DATE] AND RECORDED WITH THE [COUNTY] COUNTY AUDITOR UNDER RECORDING NUMBER [RECORDING NUMBER]. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT, A COMPLETE COPY OF WHICH IS ATTACHED TO THIS DOCUMENT.

iii. Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within thirty (30) days of the date of execution of such document.

b. Reporting Violations. Should the Grantor become aware of any violation of this Covenant, Grantor shall promptly report such violation in writing to Ecology.

c. Emergencies. For any emergency or significant change in site conditions due to Acts of Nature (for example, flood or fire) resulting in a violation of this Covenant, the Grantor is authorized to respond to such an event in accordance with state and federal law. The Grantor must notify Ecology in writing of the event and response actions planned or taken as soon as practical but no later than within 24 hours of the discovery of the event.

d. Notification procedure. Any required written notice, approval, reporting or other communication shall be personally delivered or sent by first class mail to the following persons. Any change in this contact information shall be submitted in writing to all parties to this Covenant. Upon mutual agreement of the parties to this Covenant, an alternative to personal delivery or first class mail, such as e-mail or other electronic means, may be used for these communications.

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[6] Ecology may waive this notice provision for some units at a Property where the anticipated use is a multi-tenant/owner building where some owners or tenants are unlikely to be exposed to residual contamination. For example: upper story apartments or condominiums, or commercial tenants in a strip mall, with limited rights to use the grounds under and around the building (such as for parking).

If Ecology agrees to such a waiver, the circumstances of the waiver must be detailed in paragraph 4.a.i. In addition to the specific circumstances, this provision must include the following statement: "Waiver of this advance notice to Ecology for these transactions does not constitute waiver of this notice for the entire Property nor a waiver of the requirement in Section 4.a.ii. to include this notice in any document conveying interest in the Property."

[insert contact name, address, phone number and e-mail for Grantor]	Environmental Covenants Coordinator Washington State Department of Ecology Toxics Cleanup Program P.O. Box 47600 Olympia, WA 98504 – 7600 (360) 407-6000 ToxicsCleanupProgramHQ@ecy.wa.gov

Section 5. Modification or Termination.

a. Grantor must provide written notice and obtain approval from Ecology at least sixty (60) days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. [7] For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the site: [8]

i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and

ii. If Ecology approves of the proposal, the Covenant must be amended to reflect the change before the activity or use can proceed.

b. If the conditions at the site requiring a Covenant have changed or no longer exist, then the Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

c. ***[Optional]*** By signing this agreement, per RCW 64.70.100, the original signatories to this agreement, other than Ecology, agree to waive all rights to sign amendments to and termination of this Covenant. [9]

Section 6. Enforcement and Construction.

a. This Covenant is being freely and voluntarily granted by the Grantor.

b. Within ten (10) days of execution of this Covenant, Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of the Covenant and proof of recording to others required by RCW 64.70.070.

c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any

[7] Example of inconsistent uses are using the Property for a use not allowed under the covenant (i.e. mixed residential and commercial use on a property restricted to industrial uses), OR drilling a water supply well when use of the groundwater for water supply is prohibited by the covenant.
[8] An example of an activity that is unlikely to be considered a permanent modification is a proposal to disturb a cap to repair an existing underground utility that passes through the site. However, installing a new underground utility within a capped area would be a permanent change.
[9] As time passes, the original grantor and other signers of the Covenant may no longer exist as viable entities. This provision is intended to allow future amendments or termination of the Covenant without Ecology having to seek court authorization, as provided by RCW 64.70.100.

and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.

d. The Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, the Grantor, upon request by Ecology, shall be obligated to pay for Ecology's costs to process a request for any modification or termination of this Covenant and any approval required by this Covenant.

e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.

f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.

g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

[GRANTOR'S SIGNATURE BLOCK FOR ORIGINAL COVENANTS]

Each person who signs must have a separate signature block and applicable notary acknowledgment. Repeat as many times as necessary.

Holders of other property interests must either sign the amended Covenant as a GRANTOR or sign the subordination agreement in Exhibit D.

The undersigned Grantor warrants he/she holds the title **[to the Property] OR [to an (Easement/Right of Way/etc.) on the Property]** and has authority to execute this Covenant.

EXECUTED this _____ day of _____, 20___.

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Insert one of the following, as applicable after each signature. See example format on page after next:

INDIVIDUAL ACKNOWLEDGMENT
CORPORATE ACKNOWLEDGMENT
REPRESENTATIVE ACKNOWLEDGEMENT

[GRANTOR'S SIGNATURE BLOCK FOR AMENDED COVENANTS]

Each person who signs must have a separate signature block and applicable notary acknowledgment. Repeat as many times as necessary.

When amending a Covenant, each GRANTOR of the existing Covenant must sign the amended Covenant unless the GRANTOR waived its rights under Section 5(b) of the Covenant.

Holders of other property interests must either sign the amended Covenant as a GRANTOR or sign the subordination agreement in Exhibit D.

The undersigned Grantor warrants he/she holds the title **[to the Property] OR [to an (Easement/Right of Way/etc.) on the Property]** and has authority to execute this Covenant.

EXECUTED this _____ day of _____, 20___.

The undersigned further acknowledges [Environmental or Restrictive] Covenant [# OF THE ORIGINAL COVENANT] filed in **[_____]** County, is hereby terminated and replaced with the above Environmental Covenant.

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Insert one of the following, as applicable. See example format on next page:

INDIVIDUAL ACKNOWLEDGMENT
CORPORATE ACKNOWLEDGMENT
REPRESENTATIVE ACKNOWLEDGEMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

_____
Notary Public in and for the State of Washington [10]
Residing at _____
My appointment expires _____

CORPORATE ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of Washington [15]
Residing at _____
My appointment expires _____

REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the _____ [TYPE OF AUTHORITY] of _____ [NAME OF PARTY BEING REPRESENTED] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington [15]
Residing at _____
My appointment expires _____

[10] Where landowner is located out of state, replace with appropriate out-of-state title and location.

[ECOLOGY'S SIGNATURE BLOCK]

The Department of Ecology**,** hereby accepts the status as GRANTEE and HOLDER of the above Environmental Covenant.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Dated: _____

STATE ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the state agency that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said state agency.

_____
Notary Public in and for the State of Washington

Residing at _____

My appointment expires _____

Exhibit A

LEGAL DESCRIPTION

(Required)

Exhibit B

PROPERTY MAP

(Required)

Exhibit C

MAP ILLUSTRATING LOCATION OF RESTRICTIONS

While a map illustrating the location of the restrictions is required, the grantor has the option of creating a separate map or including this information in Exhibit B.

More than one map may be necessary to illustrate the area subject to restrictions. For example, the area encompassing a soil cap may be different than the area where vapor or groundwater contamination is a concern.

The area subject to the restrictions, if less than the entire property, should be a contiguous area with even boundaries that follow physical features on the site so the boundary can be easily discerned in the field.

Exhibit D

SUBORDINATION AGREEMENT

KNOW ALL PERSONS, That __ [HOLDER'S NAME] __, the owner and holder of that certain __[INSTRUMENT – E.G. EASEMENT/ROW/MORTGAGE/ETC.]__ bearing the date the _____ day of __[MONTH]__, __ [YEAR] __, executed by __[NAME OF PERSON THAT GRANTED THE INTEREST BEING SUBORDINATED] __, __[LEGAL STATUS OF ORIGINAL GRANTOR – E.G. LANDOWNER, CORPORATE OFFICER, ETC.]__, and recorded in the office of the County Auditor of __[COUNTY]__ County, State of Washington, on __[DATE]__, under Auditor's File Number _____, does hereby agree that said Instrument shall be subordinate to the interest of the State of Washington, Department of Ecology, under the environmental (restrictive) covenant dated __[DATE]__, executed by __[NAME OF PERSON SIGNING THIS SUBORDINATION AGREEMENT]__, and recorded in __[COUNTY]__ County, Washington under Auditor's File Number _____.

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Dated: _____

Insert one of the following, as applicable. See example format on next page:

INDIVIDUAL ACKNOWLEDGMENT
CORPORATE ACKNOWLEDGMENT
REPRESENTATIVE ACKNOWLEDGEMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

_____
Notary Public in and for the State of Washington [11]
Residing at _____
My appointment expires _____

CORPORATE ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of Washington [16]
Residing at _____
My appointment expires _____

REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the _____ [TYPE OF AUTHORITY] of _____ [NAME OF PARTY BEING REPRESENTED] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington [16]
Residing at _____
My appointment expires _____

[11] Where landowner is located out of state, replace with appropriate out-of-state title and location.

APPENDIX 1

EXAMPLE SITE-SPECIFIC COVENANT PROVISIONS

a. Land Use. [12]

Option 1 Industrial Land Use: The remedial action for the Property is based on a cleanup designed for industrial property. As such, the Property shall be used in perpetuity only for industrial uses, as that term is defined in the rules promulgated under Chapter 70.105D RCW. Prohibited uses on the Property include but are not limited to residential uses, childcare facilities, K-12 public or private schools, parks, grazing of animals, growing of food crops, and non-industrial commercial uses.

Option 2 Commercial Land Use: The remedial action for the Property is based on a cleanup designed for commercial property. As such, the Property shall be used in perpetuity only for commercial land uses as that term is defined in the rules promulgated under Chapter 70.105D RCW. Prohibited uses on the Property include but are not limited to residential uses, childcare facilities, K-12 public or private schools, parks, grazing of animals, and growing of food crops.

Option 3 Park: The remedial action for the Property is based on a cleanup designed for a public park. As such, the Property shall be used in perpetuity only for a public park. Prohibited uses on the Property include but are not limited to residential uses, childcare facilities, K-12 public or private schools, grazing of animals, and growing of food crops.

Option 4 [Specify other land use limitations as appropriate.]

b. Containment of Soil/Waste Materials. [13]

[Use where contaminated soil or solid or hazardous waste remains on the property.]

The remedial action for the Property is based on containing contaminated soil **[and waste materials]** under a cap consisting of **[Insert a description of the cap]** [14] and located as illustrated in **[Exhibit B/C]** [15]. The primary purpose of this cap is to **[Insert purpose of cap].** [16] As such, the following restrictions shall apply within the area illustrated in **[Exhibit B/C]** [17]:

Option 1 [Use where a cap is required.] Any activity on the Property that will compromise the integrity of the cap including: drilling; digging; piercing the cap with sampling device, post, stake or similar device; grading; excavation; installation of underground utilities; removal of the cap; or, application of loads in excess of the cap load bearing capacity, is prohibited without prior written approval by Ecology. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to the cap. Unless an alternative plan has been approved by Ecology in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

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[12] Use one of these restrictions only if the underlying zoning allows the use.
[13] Waste materials means solid wastes as defined in Chapter 70.95 RCW or hazardous wastes as defined in Chapter 70.105 RCW and the rules promulgated under these statutes.
[14] Such as: an X foot thick layer of clean soil; an engineered cap consisting of X inches of clean soil overlying a X mil thick geomembrane and/or clay layer; asphalt pavement; an X square foot building, etc.]
[15] Be very clear in describing or diagramming where the contamination is located relative to a legally defined benchmark such as a property line or survey monument; or use a legal description.
[16] Such as: minimize the potential for contact with contaminated soil; minimize leaching of contaminants to groundwater and surface water; prevent runoff from contacting contaminated soil; minimize airborne contaminants. A cap may have multiple purposes.
[17] NOTE: More than one exhibit may be necessary to illustrate the area restricted by this and other limitations.

Option 2 [Use when contamination is left behind under a building.]

The Grantor shall not alter or remove the existing structures on the Property in any manner that would expose contaminated soil **[and waste materials]**, result in a release to the environment of contaminants, or create a new exposure pathway, without prior written approval of Ecology. Should the Grantor propose to remove all or a portion of the existing structures illustrated in **[Exhibit B/C]** so that access to the underlying contamination is feasible, Ecology may require treatment or removal of the underlying contaminated soil **[and waste materials]**.

Option 3: [Use when periodic inspections of a cap/building are included.]

The Grantor covenants and agrees that it shall annually, or at another time as approved in writing by Ecology, inspect the **[cap/building]** and report within thirty (30) days of the inspection the condition of the **[cap/building]** and any changes to the **[cap/building]** that would impair its performance.

c. Stormwater facilities. [Use when infiltration needs to be controlled to minimize leaching from soil or waste materials, or spreading of groundwater contamination.]

To minimize the potential for mobilization of contaminants remaining in the **[soil/waste materials/groundwater]** on the Property, no stormwater infiltration facilities or ponds shall be constructed **[on the Property] OR [within the area of the Property illustrated in Exhibit B/C]**. All stormwater catch basins, conveyance systems, and other appurtenances located within this area shall be of water-tight construction.[18]

d. Vapor/gas controls. [Use when vapors and/or methane gas are a concern. An example of when this provision would be appropriate is if a soil cap or a groundwater conditional point of compliance are being used to address volatile contaminants remaining on the property.]

The residual contamination on the Property includes **[volatile chemicals that may generate harmful vapors] and/or [biodegradable wastes/chemicals that may generate methane, a combustible gas]**. As such, the following restrictions shall apply **[on the Property]** or **[within the area of the Property illustrated in Exhibit B/C]** to minimize the potential for exposure to these vapors:

1. No building or other enclosed structure shall be constructed **[on the Property/within this area]** unless approved by Ecology.
2. If a building or other enclosed structure is approved, it shall be constructed with a sealed foundation and a **[vapor/gas]** control system that is operated and maintained to prevent the migration of **[vapors/gas]** into the building or structure, unless an alternative approach is approved by Ecology.

e. Groundwater Use. [Use when groundwater use restrictions are required.]

The groundwater beneath **[the Property] OR [within the area of the Property illustrated in Exhibit B/C]** remains contaminated and shall not be extracted for any purpose other than temporary construction dewatering, investigation, monitoring or remediation. Drilling of a well for any water supply purpose is strictly prohibited. Groundwater extracted **[from the**

[18] NOTE: Most local ordinances require on-site infiltration of runoff. If redevelopment of the Property is anticipated, the cleanup plan should reserve an area for this infiltration to occur without exacerbating leaching of residual soil contamination or enhancing movement of contaminants within the groundwater.

Property/within this area] for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.

f. Sediments. [Use for sediment cleanup sites.] [19]

The residual contamination on the Property includes contaminated sediments. As such, the following restrictions shall apply to minimize potential disturbance of these sediments **[on the Property] OR [within the area of the Property illustrated in Exhibit B/C]**:

Option 1 [Use where a cap is required.] Any activity **[on the Property/within this area]** that will compromise the integrity of the cap including: drilling; digging; piercing the cap with sampling device, post, stake or similar device; excavation; installation of buried utilities; removal of the cap; or, application of loads in excess of the cap load bearing capacity, is prohibited without prior written approval by Ecology. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to the cap. Unless an alternative plan has been approved by Ecology in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

Option 2 No docks or other structures shall be constructed **[on the Property/within this area]** without prior written approval of Ecology.

Option 3 No dredging shall be allowed **[on the Property/within this area]** without prior written approval of Ecology.

Option 4 No ships or boats shall be allowed to anchor or use side thrusters **[on the Property/within this area]**. A no wake zone shall be enforced and ships and boats shall be limited to a draft depth of **[XX]** feet **[on the Property/within this area]**.

Option 5 No digging for clams, setting of crab pots or fishing nets, anchoring of mooring buoys or channel markers, or similar activities that could disturb the surface of the sediment shall be allowed **[on the Property/within this area]** without prior written approval of Ecology.

g. Monitoring. [Use for long-term protection of monitoring devices.]

Several **[groundwater monitoring wells, vapor probes, etc.]** are located on the Property to monitor the performance of the remedial action. The Grantor shall maintain clear access to these devices and protect them from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to any monitoring device. Unless Ecology approves of an alternative plan in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

h. Other.

[Add other property-specific use or activity restrictions and affirmative obligations that are necessary but not identified above. Examples include special remedy-specific requirements such as restrictions on structures over leachate/groundwater collection systems, or protection requirements for cut-off walls or sheet piling.]

[19] NOTE: Sediment restrictions are currently evolving. Additional guidance can be found in Ecology's Sediment Cleanup Users Manual II (SCUM II), Publication No. 12-09-057, located at: https://fortress.wa.gov/ecy/publications/SummaryPages/1209057.html

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