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# Third Semiannual Compliance Monitoring and Contingency Plan Report

## Frontier Village Shopping Center
## Lake Stevens, Washington
## VCP #NW2577
## (formerly VCP #NW0808 and NW1938)

**Prepared For:**

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## TABLE OF CONTENTS

## TABLES



## FIGURES



## ATTACHMENTS

# 1.0 INTRODUCTION

The Frontier Village Shopping Center (Frontier Village) is located at 515 State Route 9 NE in Lake Stevens, Washington, as shown in Figure 1. Frontier Village is currently occupied by several commercial tenants in a large strip of attached retail spaces on the east side of the shopping center. A former dry cleaning facility (Fowlds Dry Cleaners) was located at the northwest corner of the shopping center.

Tetrachloroethene, also known as perchloroethene (PCE), was detected in soil and groundwater at the property and Fowlds Dry Cleaners was determined to be the source of the PCE impacts. The footprint of the Fowlds Dry Cleaner Plume is referred to as the "Site" throughout this Compliance Monitoring and Contingency Plan (CMCP) Report. The Site is enrolled in Ecology's Voluntary Cleanup Program (VCP) as Site # NW2577 (formerly NW0808 and NW1938). This PCE release and resulting soil and groundwater impacts have been the focus of many environmental investigations and remedial actions since at least 1994.

The Site has already attained a No Further Action (NFA) determination for soil from the Washington State Department of Ecology (Ecology), as documented in a letter from Ecology to URS Corporation dated March 27, 2006. The residual groundwater impacts associated with the PCE release from the Site are the focus of the CMCP approved by Ecology on May 2, 2013.

The current CMCP requires the semiannual monitoring of six groundwater monitoring wells and submission of semiannual reports to Ecology. This Third Semiannual CMCP Report presents the compliance monitoring procedures and results for the September 2014 semiannual CMCP monitoring event.

# 2.0 BACKGROUND

## 2.1 Release History and Plume Descriptions

Fowlds Dry Cleaners operated from the 1970s until 2001 and the primary source of the PCE impacts appears to have been a release from a sanitary sewer line located south of the former Fowlds Dry Cleaners building. Initial investigations for environmental impacts at the Site began in November 1994. Since that time, many phases of soil and groundwater investigations have been conducted at the Site and adjoining properties to assess the extent and concentrations of chlorinated volatile organic compounds (chlorinated VOCs), specifically PCE, from the former Fowlds Dry Cleaners. Multiple extensive soil and groundwater remediation projects have been implemented at the Site and an NFA has been attained for chlorinated VOCs in soil at the Site. The remaining impacts to groundwater comprise the Fowlds Dry Cleaner Plume.

The calculated aerial extent of the Fowlds Dry Cleaner Plume, based on data from on-site monitoring wells is shown in Figure 2. The Fowlds Dry Cleaner Plume is within the uppermost-unconfined aquifer at the Site, which begins at approximately 30 to 40 feet below ground surface (bgs) and extends to the top of the low permeability silt transitional beds, which are approximately 40 to 55 feet bgs.

A separate groundwater plume known as the Offsite Source Plume is comprised of a different mixture of chlorinated VOCs and is located in the area to the south and west of the Fowlds Dry Cleaner Plume. The location and aerial extent of the Offsite Source Plume is shown on several figures in the CMCP (EPI 2013). The source area for Offsite Source Plume has not been identified; however, based on contaminant concentration distribution and groundwater flow directions, the source area is likely to the southwest, upgradient of Key Bank and North County Bank on property owned by other parties. The Offsite Source Plume contains PCE but is characterized by the additional presence of 1,1,1-trichloroethane (1,1,1-TCA), which is not present in the Fowlds Dry Cleaner Plume. 1,1,1-TCA is a distinctly different chemical that is not a breakdown product of PCE. Therefore, the presence of 1,1,1-TCA in groundwater upgradient and cross gradient to the former Fowlds Dry Cleaners building indicates a separate contaminant source and a separate plume that is unrelated to the Fowlds Dry Cleaner Plume.

### 2.2 Compliance Monitoring Well Network

The Compliance Monitoring Well Network is designed to monitor the Fowlds Dry Cleaner Plume and provide data that are used to demonstrate containment of the plume. The Compliance Monitoring Well Network consists of six monitoring wells at the locations shown in Figure 2. The wells are divided into four categories with four distinct purposes, which are summarized in the following bullets:

- **Upgradient Well** – HLW-9 is located upgradient of the Fowlds Dry Cleaner Plume and is monitored to evaluate upgradient groundwater quality.

- **Source Area Well** – HLW-14 is located within the Site and is monitored to track PCE concentration trends that signal if groundwater quality within the Fowlds Dry Cleaner Plume is stable, improving, or degrading over time.

- **Inter Plume Well** –W-6 is located between the Fowlds Dry Cleaner Plume and the Offsite Source Plume and is monitored to confirm that the plumes are not comingling.

- **Downgradient Wells** – HLW-2 and HLW-15 are located within approximately 15 linear feet of the apparent downgradient extent of the Fowlds Dry Cleaner Plume. An additional downgradient well, W-14, was installed in February 2012 to help determine the southeastern extent of the Fowlds Dry Cleaner Plume. These three downgradient wells are used to provide water quality data to demonstrate that contaminated groundwater associated with the Fowlds Dry Cleaner Plume has not migrated beyond the containment area.

## 3.0 FIELD INVESTIGATIONS

The field investigations that were performed for CMCP implementation consisted of indoor air sampling, groundwater level measurements, and groundwater sampling. The following sections describe and document the methods and procedures to implement the indoor air and groundwater measurement and sampling events.

## 3.1 Groundwater Sampling

Groundwater compliance monitoring under the CMCP consisted of measuring groundwater levels, purging wells using low-flow purging techniques, measuring and recording field parameters, sampling for groundwater COCs, and evaluating the analytical data and field measurements with respect to compliance criteria for triggering the contingency plan.

### 3.1.1 Groundwater Elevations and Flow Directions

Prior to groundwater sampling, field samplers measured the depth to water (DTW) at all compliance monitoring wells and in selected additional wells to the nearest 0.01-foot using an electronic water level indicator. The water level indicator was decontaminated prior to use and between each well by spray rinsing the probe and any part of the cable that was submerged with distilled water.

DTW measurements were made from consistent reference points (either the mark on the well casing or from the northern side of the well casing) to the static water level inside the well casing. The DTW measurements were recorded along with the time the measurement was made.

DTW measurements were performed on September 26, 2014 in all six wells that are included in the Compliance Monitoring Well Network, and in selected other wells on the same day to achieve a consistent dataset representing groundwater elevation patterns at a point in time. DTW measurements and calculated groundwater elevations are presented in Table 1. Groundwater DTW data were used to create the groundwater elevation contour and flow direction map for the September 2014 sampling event, which is shown in Figure 2.

Groundwater elevation contours and inferred groundwater flow direction arrows presented in Figure 2 indicate that groundwater flow is generally from west to east, which is consistent with historical groundwater flow patterns. Groundwater elevation contour maps demonstrate the presence of a steep hydraulic gradient on the west side of the shopping center near the Taco Time property flattening to a more moderate gradient to the north and east of Taco Time. This groundwater elevation contour pattern reflects the influence of the upper surface of the underlying lower permeability native soil in this area, which dips to the east based on geologic cross sections of the Site. The groundwater elevation contour pattern shown in Figure 2 is similar to historical data for the Site.

Groundwater gradients at the Site are significantly different under Taco Time (southwestern part of the Site) versus the area between Taco Time and Great Clips (northeastern part of the Site). Therefore, groundwater gradients based on the groundwater elevation contours presented in Figure 2 are calculated separately for these two areas of the Site.

Based on the September 2014 groundwater elevation data, the hydraulic gradient of the groundwater was approximately 0.07 ft./ft. in the northeastern part of the Site and approximately 0.10 ft./ft. in the southwestern part of the Site.

### 3.1.2 Groundwater Sampling Methods

As required by the CMCP sampling and analysis plan, monitoring wells were purged prior to sampling using dedicated submersible sampling pumps equipped with new, disposable tubing. Low-flow purging was performed in general accordance with procedures described in *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures* (USEPA, 1996).

Well purging was accomplished by starting the pump system at a low-flow rate, (approximately 0.2 to 0.5 liters per minute) and slowly increasing the pumping rate. The water level in the well was checked to maintain a drawdown of less than or equal to 0.33 feet (USEPA, 1996). If drawdown was greater than 0.33 feet, the flow rate was decreased until acceptable drawdown was achieved. Purge water was discharged through a flow cell for field parameter measurements and was contained in 5-gallon buckets for later disposition.

The field parameters temperature, pH, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were measured and recorded during purging. In addition, notes were taken describing the appearance and/or odor of the water. Purging was performed until field parameters stabilized to within the following ranges:

- pH ± 0.1 pH units
- Specific conductance ± 3 percent
- Turbidity ± 10 percent (when turbidity is greater than 10 Nephelometric Turbidity Units [NTU])
- Temperature ± 0.1°C

The final field parameter measurements for CMCP wells sampled during the September 2014 monitoring event and for previous CMCP monitoring events are summarized in Table 2.

Following purging, the sampling pump was used to obtain groundwater samples following low-flow well sampling procedures. Representative groundwater samples were collected into laboratory-cleaned, pre-labeled 40-milliliter (mL) volatile organic analysis (VOA) sample vials pre-preserved with hydrochloric acid.

Groundwater samples for chlorinated VOC analysis were collected using the slowest pumping rate reasonably achievable with the sampling pump. To check for headspace, VOA vials were capped, inverted, and checked for air bubbles. If air bubbles were present in the VOA vials they were topped off, recapped, and rechecked until they showed zero headspace.

After collection, all samples were placed in coolers with enough bagged ice to maintain an internal temperature of 4°C for the duration of the sampling and transportation to the laboratory. After each day of sampling groundwater samples were delivered to ALS Laboratory Group (ALS) for chlorinated VOC

analysis using EPA Method 8260C. Samples were handled and transported using EPI's standard chain-of-custody protocols.

### 3.1.3 Groundwater Analytical Results

Analytical results for groundwater samples collected during the September 2014 quarterly CMCP monitoring events are summarized in Table 3 and are summarized on Figure 2. Table 3 also contains analytical results for the previous CMCP sampling events for historical context. Laboratory analytical reports for the groundwater samples are included in Attachment A (provided in PDF file only).

The data indicate that, with the exception of the Source Area Well HLW-14, groundwater samples from the Downgradient Wells and the Inter Plume Well were non-detect for all chlorinated VOCs analyzed. Non-detections for chlorinated VOCs in groundwater samples from Inter Plume Well W-6 confirm that the Fowlds Dry Cleaner Plume and the Offsite Source Plume do not commingle.

Data for samples from Source Area Well HLW-14 indicate generally stable to decreasing PCE concentrations with consistent non-detections for the lesser-chlorinated VOCs. PCE was detected at a concentration of 45 µg/L in the September 2014 sample from well HLW-14. This concentration is greater than the MTCA Method A Cleanup Level of 5 µg/L. Well HLW-14 is completed in the source area for the Fowlds Dry Cleaner Plume and therefore, HLW-14 is expected to yield samples with PCE at concentrations greater than MTCA Cleanup Levels. The data are similar to historical data for samples from this well indicating stability within the source area and the containment and stability of the Fowlds Dry Cleaner Plume.

The purpose of data from source area well HLW-14 is not to demonstrate containment, but rather to document contaminant concentrations within the contained Fowlds Dry Cleaner Plume. To provide greater protectiveness, Ecology will be informed and consulted for guidance in the event that PCE concentrations in samples from the Source Area Well (HLW-14) consecutively increase 30 percent or more over two consecutive increases (i.e., total of three events).

Limiting this concentration trend evaluation to the Source Area Well, which generally has elevated concentrations, is appropriate because very low PCE concentrations possible in other compliance monitoring wells could vary by more than the 30 percent criterion solely based on seasonal sample variability, laboratory variability, or other effects not related to actual water quality trends. The increase in PCE concentration from 27 µg/L in March 2014 to 45 µg/L in September 2014 is a 40 percent increase for one event, which does not trigger any additional evaluation or contingency actions.

Data from the Upgradient Well, HLW-9, indicate that 1,1,1-TCA was detected during the March 2014 monitoring event at a concentration of 2.1 µg/L, which is significantly below the MTCA Method A Cleanup Level of 200 µg/L. This detection in the sample from HLW-9 does not represent impacts from the Fowlds Dry Cleaner Plume, which does not contain 1,1,1-TCA. In addition, 1,1,1-TCA has returned to non-detect in samples from HLW-9 based on the September 2014 sampling data.

## 4.0 CONCLUSIONS

Groundwater elevation contours and inferred flow directions indicate that groundwater flow is generally from west to east with a northerly component under the Taco Time building. The September 2014 groundwater flow patterns are similar to patterns exhibited in historical data. The inferred groundwater flow directions demonstrate that downgradient wells HLW-2, HLW-15, and W-14 are at appropriate locations to monitor groundwater downgradient of the Fowlds Dry Cleaner Plume.

The constituent 1,1,1-TCA was detected in the March 2014 sample from Upgradient Well, HLW-9; however, the detected concentration was significantly less the MTCA Method Cleanup Level of 200 μg/L. The low level detection of 1,1,1-TCA in the March 2014 sample from HLW-9 does not indicate impacts from the Fowlds Dry Cleaner Plume because the Fowlds Dry Cleaner Plume does not contain 1,1,1-TCA. In addition, the September 2014 sample from HLW-9 was non-detect for all chlorinated VOCs.

Groundwater samples from five of the six CMCP monitoring wells had non-detections for indicator parameters during the September 2014 sampling event. Groundwater samples from Source Area Well HLW-14 had PCE detections of 84 μg/L in June 2013, 97 μg/L in September 2013, 63 μg/L in December 2013, 27 μg/L in March 2014, and 45 μg/L in September 2014, which demonstrates stability and containment within the Fowlds Dry Cleaner Plume. Non-detections for all chlorinated VOCs in the remaining wells surrounding the plume positively demonstrate continued containment of the Fowlds Dry Cleaner Plume.

## 5.0 RECOMMENDATIONS

The following recommendations for future actions related to indoor air and groundwater are based on evaluations of the data presented in this report. The data evaluations used for the following recommendations also consider data and conclusions generated during previous investigations performed at the Site.

### 5.1 Indoor Air

The December 2013 sample from the waiting area at Great Clips was non-detect, which is consistent with the non-detect for the March 2013 waiting area sample. Therefore, no additional indoor air testing in the Great Clips waiting area is recommended.

The December 2013 sample from the bathroom at Great Clips had a detected PCE concentration of 16 $\mu g/m^3$, which exceeds the MTCA Method B standard formula value of 9.62 $\mu g/m^3$. However, the March 2013 Great Clips bathroom sample was non-detect, demonstrating that the indoor air sampling results are inconsistent for this sample location. We propose to sample the Great Clips bathroom again during the fall/winter 2014/2015 heating season to evaluate if PCE is still present in indoor air at the bathroom sampling location.

Indoor air results for the December 2013 dining area and bathroom samples in the Taco Time building were both non-detect indicating that the VOCs previously detected in soil vapor under the Taco Time

building do not measurably affect indoor air quality. Given the consistent non-detect results for indoor air samples at Taco Time no additional indoor air sampling at Taco Time is recommended.

In addition to the consistent non-detects for indoor air samples at Taco Time, we have initiated further remedial action for the shallow soil impacts delineated in the Taco Time drive through by modifying and restarting the existing soil vapor extraction (SVE) system that is installed in the area. Operation of the SVE system should reduce VOC concentrations in soil and soil vapor over time in this area. Operation of the SVE system has also created measurable negative pressure in the subsurface, which should effectively prevent any residual VOCs in soil vapor from entering indoor air at the Taco Time building. For the reasons noted above, we propose to discontinue indoor air sampling at Taco Time.

### 5.2 Groundwater

Groundwater data demonstrate that the containment remedy for the Fowlds Dry Cleaner Plume is performing as intended and the PCE plume is stable in size and concentration and is contained within the limits prescribed in the CMCP. CMCP groundwater data from Inter Plume Well W-6 confirm that the Fowlds Dry Cleaner Plume and the Offsite Source Area Plume do not commingle. Evaluations of the analytical data from the September 2014 CMCP monitoring event do not trigger any contingency criteria and do not warrant any changes to the monitoring program.

Based on groundwater data from September 2014, the first semiannual CMCP monitoring event, EPI recommends continuing the CMCP groundwater monitoring program using the same wells and procedures that were used for the previous CMCP monitoring events. Per the Ecology-approved CMCP, the monitoring and reporting frequency will continue to be semiannual for the next four years.

## 6.0 LIMITATIONS

To the extent that preparation of this Report has required the application of best professional judgment and the application of scientific principles, certain results of this work have been 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 Report is not to be construed as legal advice.

This Report was prepared solely for Frontier Village and Kimco Realty Corporation, and the contents herein may not be used or relied upon by any other person without the express written consent and authorization of EPI.

## 7.0 REFERENCES

Environmental Partners, Inc. (EPI). 2013. *Compliance Monitoring and Contingency Plan, Frontier Village Shopping Center, Lake Stevens, Washington, VCP #NW2577 (formerly VCP # NW0808 and NW1938).* Prepared for PK II Frontier Village SC LLC, Kimco Realty Corporation. March 18, 2013.

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U. S. Environmental Protection Agency (USEPA). 1996. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*. EPA/540/S-95/504. *Ground Water Issue*. April 1996.

Washington State Department of Ecology (Ecology). 2009. *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action.* Review Draft, Publication No. 09-09-047. Toxics Cleanup Program. October 2009.

# Tables

**Table 1**
**Measured Depth to Water and Groundwater Elevations**
**Frontier Village Shopping Center (VCP #NW2577)**
**Lake Stevens, Washington**

| Well ID | Top of Casing Elevation (feet NAVD 88) | September 2014 DTW (ft. below TOC) | September 2014 Water Level Elevation (feet NAVD 88) |
|---|---|---|---|
| W-1 | 355.57 | NM | -- |
| W-6 | 351.39 | 24.11 | 327.28 |
| W-7 | 352.15 | NM | -- |
| W-8 | 356.83 | NM | -- |
| W-9 | 357.00 | 37.89 | 319.11 |
| W-10 | 356.73 | NM | -- |
| W-11 | 357.39 | 38.16 | 319.23 |
| W-12 | 357.37 | 42.27 | 315.10 |
| W-13 | 357.41 | 42.53 | 314.88 |
| W-14 | 358.40 | 43.82 | 314.58 |
| HLW-1 | 356.59 | NM | -- |
| HLW-2 | 356.99 | 42.05 | 314.94 |
| HLW-3 | 357.30 | 33.75 | 323.55 |
| HLW-9 | 349.69 | 15.39 | 334.30 |
| HLW-14 | 357.60 | 34.52 | 323.08 |
| HLW-15 | 356.59 | 41.68 | 314.91 |
| HLW-16 | 355.18 | 38.67 | 316.51 |
| MW-22 | 353.83 | NM | -- |
| MW-26 | 349.40 | 15.84 | 333.56 |
| MW-27 | 353.82 | 23.35 | 330.47 |

Notes:
Vertical Datum: North American Vertical Datum 1988 (NAVD 88).

| | |
|---|---|
| DTW | Depth to Water (ft.) |
| NM | Not Measured |
| TOC | Top of Casing |
| -- | Elevation not calculated |

**Table 2**
**Groundwater Sampling Field Parameter Stabilization Measurements**
**Frontier Village Shopping Center (VCP #NW2577)**
**Lake Stevens, Washington**

| Well ID | Date Sampled | DTW (feet) | pH | Specific Conductance (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | Temperature (°C) | Oxidation Reduction Potential (mV) | Appearance |
|---|---|---|---|---|---|---|---|---|---|
| HLW-9 | 6/19/13 | 14.88 | 6.31 | 0.244 | 8.77 | 5.38 | 14.39 | 98.0 | clear |
| | 9/24/13 | 14.94 | 6.41 | 0.189 | 5.65 | 5.46 | 15.96 | 153.9 | clear |
| | 12/17/13 | 15.19 | 6.42 | 0.517 | 1.17 | 5.32 | 13.74 | 146.3 | clear |
| | 3/25/14 | 12.53 | 6.39 | 0.312 | 1.83 | 5.44 | 14.89 | 151.1 | clear |
| | 9/26/14 | 15.39 | 6.37 | 0.200 | 1.98 | 4.79 | 15.08 | 32.4 | clear |
| W-6 | 6/19/13 | 22.56 | 6.51 | 0.302 | 15.20 | 3.70 | 15.41 | 91.4 | clear |
| | 9/24/13 | 23.35 | 6.6 | 0.259 | 9.39 | 3.91 | 16.44 | 140.9 | clear |
| | 12/17/13 | 23.91 | 6.57 | 0.621 | 9.92 | 3.96 | 14.69 | 150.0 | clear |
| | 3/25/14 | 23.23 | 6.62 | 0.410 | 9.93 | 4.03 | 15.12 | 147.7 | clear |
| | 9/26/14 | 24.11 | 6.49 | 0.264 | 8.37 | 3.47 | 15.86 | 20.0 | clear |
| HLW-14 | 6/19/13 | 33.20 | 6.48 | 0.565 | 88.30 | 6.64 | 15.18 | 48.1 | copper colored |
| | 9/24/13 | 33.95 | 6.6 | 0.326 | 9.61 | 6.48 | 16.63 | 123.1 | clear |
| | 12/17/13 | 34.37 | 6.57 | 0.755 | 1.17 | 7.99 | 14.13 | 150.6 | clear |
| | 3/25/14 | 33.92 | 6.57 | 0.491 | 8.67 | 6.63 | 15.31 | 120.7 | clearing |
| | 9/26/14 | 34.52 | 6.42 | 0.482 | 1.15 | 7.00 | 14.48 | 43.6 | clear |
| HLW-2 | 6/19/13 | 38.41 | 6.71 | 0.399 | 16.00 | 3.59 | 15.12 | 72.7 | clear |
| | 9/24/13 | 40.71 | 6.9 | 0.375 | 9.95 | 3.56 | 15.50 | 111.8 | clear |
| | 12/17/13 | 42.43 | 6.95 | 0.761 | 61.50 | 3.30 | 13.78 | 143.5 | clearing |
| | 3/25/14 | 41.35 | 6.93 | 0.407 | 35.90 | 3.23 | 14.79 | 122.2 | clear |
| | 9/26/14 | 42.05 | 6.88 | 0.362 | 60.40 | 3.15 | 15.85 | 16.0 | clearing |
| W-14 | 6/19/13 | 40.83 | 6.43 | 0.379 | 7.14 | 5.33 | 15.27 | 89.0 | clear |
| | 9/24/13 | 43.13 | 6.46 | 0.478 | 8.38 | 8.91 | 14.32 | 163.1 | clear, yellow |
| | 12/17/13 | 34.37 | 6.61 | 0.686 | 9.58 | 6.64 | 14.25 | 148.3 | clear |
| | 3/25/14 | 42.92 | 6.67 | 0.535 | 7.76 | 5.45 | 14.83 | 122.1 | clear |
| | 9/26/14 | 43.82 | 6.54 | 0.345 | 9.31 | 5.05 | 16.17 | 29.8 | clear |
| HLW-15 | 6/19/13 | 38.68 | 6.48 | 0.413 | 9.91 | 5.37 | 16.93 | 73.1 | clear |
| | 9/24/13 | 40.97 | 6.76 | 0.314 | 35.50 | 6.68 | 15.90 | 124.7 | clearing |
| | 12/17/13 | 42.04 | 6.77 | 0.697 | 9.78 | 6.56 | 13.53 | 142.5 | clear |
| | 3/25/14 | 40.98 | 6.63 | 0.523 | 9.81 | 6.42 | 14.87 | 102.9 | clear |
| | 9/26/14 | 41.68 | 6.81 | 0.317 | 25.0 | 5.29 | 16.20 | 24.7 | clear |

Notes:

| | |
|---|---|
| DTW | Depth to groundwater. |
| mS/cm | Millisiemens per centimeter. |
| NTU | Nephelometric tubidity unit. |
| mg/L | Milligrams per liter. |
| °C | Degrees Celsius. |
| mV | Millivolts. |

**Table 3**
**Groundwater Sampling Analytical Results Summary**
**Frontier Village Shopping Center (VCP #NW2577)**
**Lake Stevens, Washington**

| Well ID | Sample Date | Well Purpose | Constituent Concentration in ug/L | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | PCE | TCE | cDCE | tDCE | VC | 1,1,1-TCA |
| HLW-9 | 6/19/13 | Upgradient Well | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/24/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 12/17/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 3/25/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | **2.1** |
| | 9/26/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| W-6 | 6/19/13 | Inter-Plume Well | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/24/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 12/17/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 3/25/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/26/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| HLW-14 | 6/19/13 | Source Area Well | **84** | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/24/13 | | **97** | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 12/17/13 | | **63** | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 3/25/14 | | **27** | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/26/14 | | **45** | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| HLW-2 | 6/19/13 | Downgradient Well | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/24/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 12/17/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 3/25/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/26/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| W-14 | 6/19/13 | Downgradient Well | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/24/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 12/17/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 3/25/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/26/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| HLW-15 | 6/19/13 | Downgradient Well | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/24/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 12/17/13 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 3/25/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| | 9/26/14 | | <2.0 | <2.0 | <2.0 | <2.0 | <0.2 | <2.0 |
| MTCA Method A Cleanup Levels | | | 5 | 5 | RND | RND | 0.2 | 200 |
| MTCA Method B Cleanup Levels (carcinogenic) | | | 21 | 0.54 | NR | NR | 0.029 | NR |
| MTCA Method B Cleanup Levels (non-carcinogenic) | | | 48 | 4 | 16 | 160 | 24 | 1,600 |

**Notes:**

All results presented in micrograms per Liter (µg/L).

**Bold** Bold results indicate detected concentrations greater than the Method Detection Limit.

Shaded results indicate those that exceed the Model Toxics Control Act (MTCA) Cleanup Levels.

< Compound was not detected at the listed reporting limit.

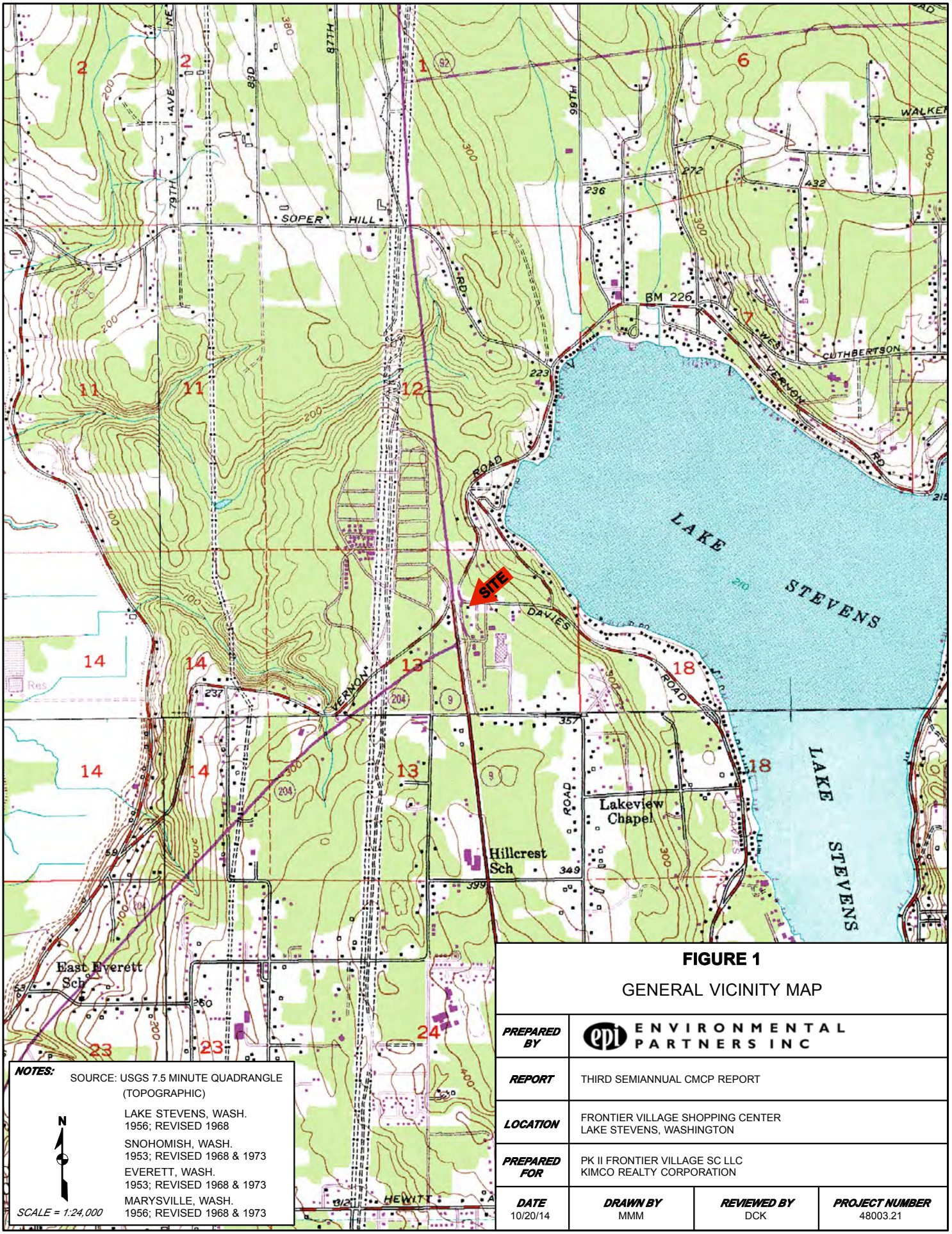
RND "Researched – No Data" – indicates that research was conducted and no value exists for this compound in the CLARC database.

NR "Not Researched" – research has not been conducted for this compound, no value exists in the Cleanup Levels and Risk Calculations (CLARC) database.

**Compounds:**

PCE = Tetrachlorothene
TCE = Trichloroethene
cDCE = cis-1,2-Dichloroethene
tDCE = trans-1,2-Dichloroethene
VC = Vinyl chloride
1,1,1-TCA = 1,1,1,-Trichloroethane

# Figures




**NOTES:**

SOURCE: USGS 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC)

LAKE STEVENS, WASH.
1956; REVISED 1968

SNOHOMISH, WASH.
1953; REVISED 1968 & 1973

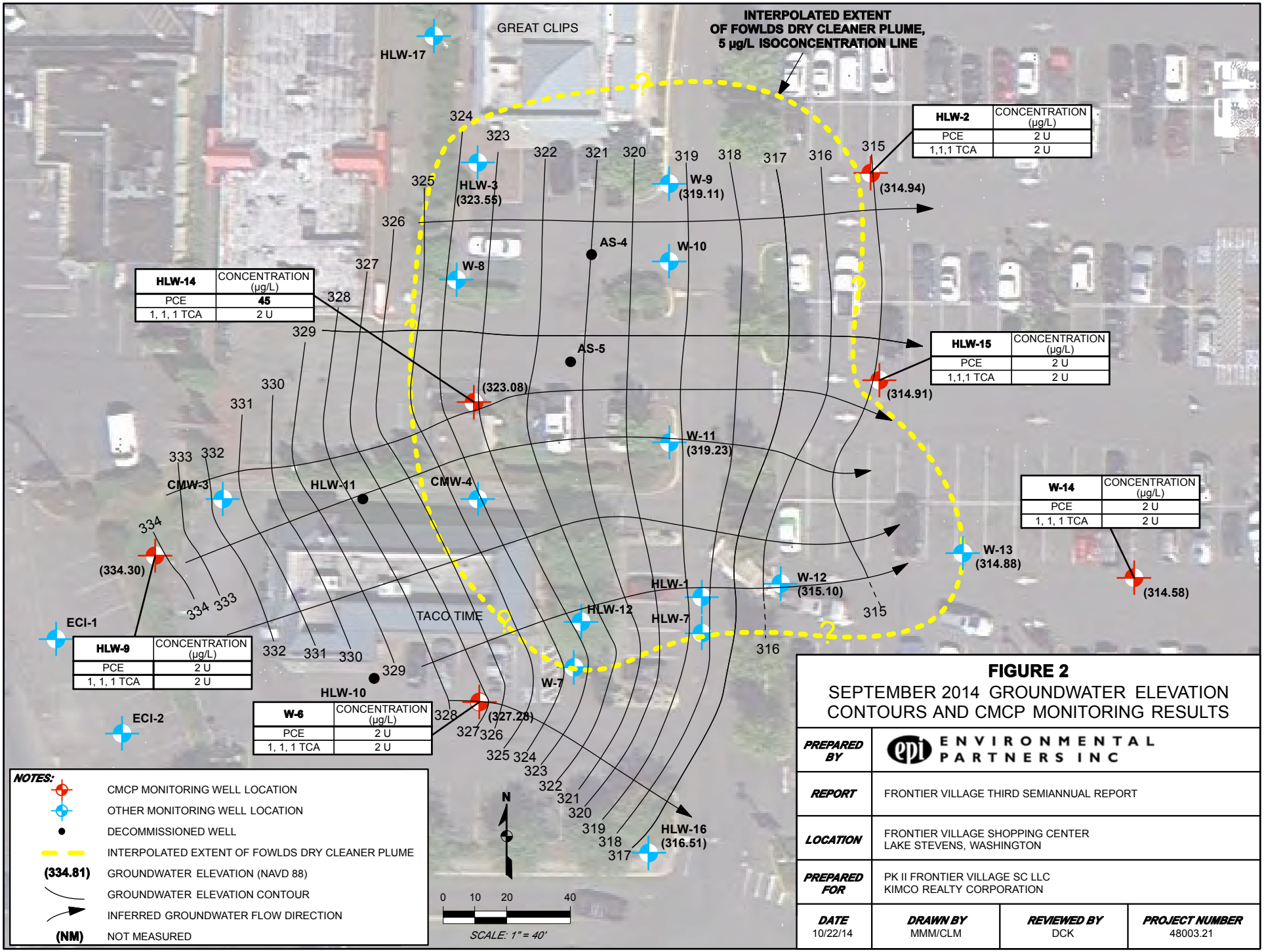
EVERETT, WASH.
1953; REVISED 1968 & 1973

MARYSVILLE, WASH.
1956; REVISED 1968 & 1973

**FIGURE 1**

GENERAL VICINITY MAP

| | | | |
|---|---|---|---|
| **PREPARED BY** | ENVIRONMENTAL PARTNERS INC | | |
| **REPORT** | THIRD SEMIANNUAL CMCP REPORT | | |
| **LOCATION** | FRONTIER VILLAGE SHOPPING CENTER<br>LAKE STEVENS, WASHINGTON | | |
| **PREPARED FOR** | PK II FRONTIER VILLAGE SC LLC<br>KIMCO REALTY CORPORATION | | |
| **DATE**<br>10/20/14 | **DRAWN BY**<br>MMM | **REVIEWED BY**<br>DCK | **PROJECT NUMBER**<br>48003.21 |




# FIGURE 2

## SEPTEMBER 2014 GROUNDWATER ELEVATION CONTOURS AND CMCP MONITORING RESULTS

| | | | |
|---|---|---|---|
| **PREPARED BY** | ENVIRONMENTAL PARTNERS INC | | |
| **REPORT** | FRONTIER VILLAGE THIRD SEMIANNUAL REPORT | | |
| **LOCATION** | FRONTIER VILLAGE SHOPPING CENTER<br>LAKE STEVENS, WASHINGTON | | |
| **PREPARED FOR** | PK II FRONTIER VILLAGE SC LLC<br>KIMCO REALTY CORPORATION | | |
| **DATE**<br>10/22/14 | **DRAWN BY**<br>MMM/CLM | **REVIEWED BY**<br>DCK | **PROJECT NUMBER**<br>48003.21 |

# Attachment A
# Laboratory Analytical Reports
# (included in PDF file only)

October 1, 2014

Mr. Doug Kunkel
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

Dear Mr. Kunkel,

On September 26th, 8 samples were received by our laboratory and assigned our laboratory project number EV14090187. The project was identified as your 48003.21. 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 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-01 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 11:37:00 AM |
| CLIENT SAMPLE ID | FV-W-6-0 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS JOB#: | EV14090187 |
| | | ALS SAMPLE#: | EV14090187-01 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 11:37:00 AM |
| CLIENT SAMPLE ID | FV-W-6-0 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **96.6** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **99.8** | 09/30/2014 | DLC |

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



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## CERTIFICATE OF ANALYSIS

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|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-02 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 12:05:00 PM |
| CLIENT SAMPLE ID | FV-HLW-9-0 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS JOB#: | EV14090187 |
| | | ALS SAMPLE#: | EV14090187-02 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 12:05:00 PM |
| CLIENT SAMPLE ID | FV-HLW-9-0 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **97.9** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **96.8** | 09/30/2014 | DLC |

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



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| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-03 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 12:38:00 PM |
| CLIENT SAMPLE ID | FV-HLW-2-0 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS JOB#: | EV14090187 |
| | | ALS SAMPLE#: | EV14090187-03 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 12:38:00 PM |
| CLIENT SAMPLE ID | FV-HLW-2-0 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **97.9** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **96.1** | 09/30/2014 | DLC |

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-04 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 1:21:00 PM |
| CLIENT SAMPLE ID | FV-HLW-15-0 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS JOB#: | EV14090187 |
| | | ALS SAMPLE#: | EV14090187-04 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 1:21:00 PM |
| CLIENT SAMPLE ID | FV-HLW-15-0 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **97.1** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **97.2** | 09/30/2014 | DLC |

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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-05 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 1:53:00 PM |
| CLIENT SAMPLE ID | FV-W-14-0 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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ALS Laboratory Group A Campbell Brothers Limited Company

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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS JOB#: | EV14090187 |
| | | ALS SAMPLE#: | EV14090187-05 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 1:53:00 PM |
| CLIENT SAMPLE ID | FV-W-14-0 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **96.8** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **95.7** | 09/30/2014 | DLC |

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ALS Laboratory Group A Campbell Brothers Limited Company

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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-06 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 2:22:00 PM |
| CLIENT SAMPLE ID | FV-HLW-14-0 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | **45** | 20 | 10 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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ALS Laboratory Group A Campbell Brothers Limited Company

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS JOB#: | EV14090187 |
| | | ALS SAMPLE#: | EV14090187-06 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 2:22:00 PM |
| CLIENT SAMPLE ID | FV-HLW-14-0 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **95.6** | 09/30/2014 | DLC |
| 1,2-Dichloroethane-d4 10X Dilution | EPA-8260 | **97.9** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **98.6** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene 10X Dilution | EPA-8260 | **96.6** | 09/30/2014 | DLC |

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



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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-07 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 |
| CLIENT SAMPLE ID | FV-HLW-14-1 | 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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | **50** | 20 | 10 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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ALS Laboratory Group A Campbell Brothers Limited Company

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-07 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 |
| CLIENT SAMPLE ID | FV-HLW-14-1 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **98.2** | 09/30/2014 | DLC |
| 1,2-Dichloroethane-d4 10X Dilution | EPA-8260 | **97.8** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **98.5** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene 10X Dilution | EPA-8260 | **97.4** | 09/30/2014 | 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.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-08 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 |
| CLIENT SAMPLE ID | FV-TRIPBLANK-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 | 09/30/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/30/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/30/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |



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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE:<br>ALS JOB#:<br>ALS SAMPLE#: | 10/1/2014<br>EV14090187<br>EV14090187-08 |
| CLIENT CONTACT: | Doug Kunkel | DATE RECEIVED: | 09/26/2014 |
| CLIENT PROJECT: | 48003.21 | COLLECTION DATE: | 9/26/2014 |
| CLIENT SAMPLE ID | FV-TRIPBLANK-2 | WDOE ACCREDITATION: | C601 |

## SAMPLE DATA RESULTS

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/30/2014 | DLC |

| SURROGATE | METHOD | %REC | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | EPA-8260 | **97.1** | 09/30/2014 | DLC |
| 4-Bromofluorobenzene | EPA-8260 | **98.1** | 09/30/2014 | DLC |

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



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## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS SDG#: | EV14090187 |
| | | WDOE ACCREDITATION: | C601 |
| CLIENT CONTACT: | Doug Kunkel | | |
| CLIENT PROJECT: | 48003.21 | | |

## LABORATORY BLANK RESULTS

### MB-092914W - Batch 86537 - Water by EPA-8260

| ANALYTE | METHOD | RESULTS | REPORTING LIMITS | DILUTION FACTOR | UNITS | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Chloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Vinyl Chloride | EPA-8260 | U | 0.20 | 1 | ug/L | 09/29/2014 | DLC |
| Bromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Chloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Carbon Tetrachloride | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Trichlorofluoromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Methylene Chloride | EPA-8260 | U | 5.0 | 1 | ug/L | 09/29/2014 | DLC |
| Trans-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Cis-1,2-Dichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 2,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Bromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Chloroform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1,1-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2-Dichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Trichloroethene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Dibromomethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Bromodichloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Trans-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Toluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Cis-1,3-Dichloropropene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1,2-Trichloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,3-Dichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Tetrachloroethylene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Dibromochloromethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2-Dibromoethane | EPA-8260 | U | 0.01 | 1 | ug/L | 09/29/2014 | DLC |
| Chlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1,1,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Bromoform | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,1,2,2-Tetrachloroethane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2,3-Trichloropropane | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Bromobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 2-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 4-Chlorotoluene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |



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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

## CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS SDG#: | EV14090187 |
| | | WDOE ACCREDITATION: | C601 |
| CLIENT CONTACT: | Doug Kunkel | | |
| CLIENT PROJECT: | 48003.21 | | |

## LABORATORY BLANK RESULTS

**MB-092914W - Batch 86537 - Water by EPA-8260**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,3 Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,4-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2-Dichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2-Dibromo 3-Chloropropane | EPA-8260 | U | 10 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2,4-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| Hexachlorobutadiene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |
| 1,2,3-Trichlorobenzene | EPA-8260 | U | 2.0 | 1 | ug/L | 09/29/2014 | DLC |

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



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|---|---|---|---|
| CLIENT: | Environmental Partners, Inc.<br>1180 NW Maple St, Suite 310<br>Issaquah, WA 98027 | DATE: | 10/1/2014 |
| | | ALS SDG#: | EV14090187 |
| | | WDOE ACCREDITATION: | C601 |
| CLIENT CONTACT: | Doug Kunkel | | |
| CLIENT PROJECT: | 48003.21 | | |

## LABORATORY CONTROL SAMPLE RESULTS

**ALS Test Batch ID: 86537 - Water by EPA-8260**

| SPIKED COMPOUND | METHOD | %REC | RPD | QUAL | ANALYSIS DATE | ANALYSIS BY |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene - BS | EPA-8260 | **112** | | | 09/29/2014 | DLC |
| 1,1-Dichloroethene - BSD | EPA-8260 | **114** | **2** | | 09/29/2014 | DLC |
| Trichloroethene - BS | EPA-8260 | **110** | | | 09/29/2014 | DLC |
| Trichloroethene - BSD | EPA-8260 | **111** | **1** | | 09/29/2014 | DLC |
| Toluene - BS | EPA-8260 | **105** | | | 09/29/2014 | DLC |
| Toluene - BSD | EPA-8260 | **107** | **2** | | 09/29/2014 | DLC |
| Chlorobenzene - BS | EPA-8260 | **111** | | | 09/29/2014 | DLC |
| Chlorobenzene - BSD | EPA-8260 | **113** | **1** | | 09/29/2014 | DLC |

APPROVED BY

Laboratory Director



ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

**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): EV1409 0187

Date 9/26/14 Page 1 Of 1

PROJECT ID: 480032 1
REPORT TO COMPANY: EPI
PROJECT MANAGER: Doug Kimbel
ADDRESS: 1180 NW Maple St, Ste 310
Issaquah, WA 98027
PHONE: 425-395-0010 FAX: 425-395-0011
P.O. #: E-MAIL: dougk@epi-wa.com
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

| SAMPLE I.D. | DATE | TIME | TYPE | LAB# | NWTPH-HCID | NWTPH-DX | NWTPH-GX | BTEX by EPA-8021 | MTBE by EPA-8021 ☐ 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 ☐ Pesticides ☐ by EPA 8081/8082 | Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐ | Metals Other (Specify) | TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐ | OTHER (Specify) | NUMBER OF CONTAINERS | RECEIVED IN GOOD CONDITION? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. FV-W-6-0 | 9/26/14 | 1137 | W | 1 | | | | | | X | | | | | | | | | | | 3 | |
| 2. FV-HLW-9-0 | | 1205 | | 2 | | | | | | X | | | | | | | | | | | 3 | |
| 3. FV-HLW-2-0 | | 1238 | | 3 | | | | | | X | | | | | | | | | | | 3 | |
| 4. FV-HLW-15-0 | | 1321 | | 4 | | | | | | X | | | | | | | | | | | 3 | |
| 5. FV-W-14-0 | | 1353 | | 5 | | | | | | X | | | | | | | | | | | 3 | |
| 6. FV-HLW-14-0 | | 1422 | | 6 | | | | | | X | | | | | | | | | | | 3 | |
| 7. FV-HLW-14-1 | | — | | 7 | | | | | | X | | | | | | | | | | | 3 | |
| 8. FV-TRIPBLANK-2 | ↓ | — | ↓ | 8 | | | | | | X | | | | | | | | | | | 2 | |
| 9. | | | | | | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: EPI 9/26/14
Received By: ALS 9/26/14
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